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ABSTRACT

This document helps districts implement the new teacher licensure standards and ensure that staff are assigned to classes they are qualified to teach. It identifies both the existing certification areas and the new licensure areas that are required for teaching specific courses. The areas included are: agriculture; business; career-based intervention programs; computer technology; education of the handicapped; English language arts; family and consumer sciences; foreign language; health education; health occupations; industrial technology/technology education; library/media; mathematics; music; physical education; science; social studies; trade and industrial; and visual arts. For each area, the document provides information on subject code and title; subject definition; subject credit; license type; license code; licensure area; certificate type; certificate code; and certificate area. (SM)

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ED 443 796

Certification/Licensure Dictionary

Ohio Department of Education

Division of Professional Development & Licensure

SP039352

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Introduction

Teacher expertise is the most important factor in determining student achievement. Two recent reports, What Matters Most: Teaching for America's Future (NCTAF) and Pursuing Excellence (TIMSS), point to the close relationship between students' achievement and the knowledge, skills, and the expertise of their teachers.

The following research supports that teacher quality is crucial to what students learn:

1. Teachers' expertise accounts for far more variation in students' achievement that any other factor (Ferguson, 1991).
2. A review of 60 studies finds that teacher education, ability, and experiences are associated with significant increases in student achievement. (Greenwald, Hedges, and Laine, 1996).
3. A study of high-and low-achieving schools in New York City with similar student populations reports that differences in teacher qualifications accounted for more than 90% of the variation in student achievement in reading and mathematics at all grade levels tested. (Armour-Thomas, Clay, Domanico, Bruno, and Allen, 1989).
4. A Tennessee study of the effects of teachers on student learning indicates that elementary school students who are assigned to ineffective teachers for three years in a row score fifty percentile points lower on achievement tests than those assigned to the most effective teachers over the same period of time. (Sanders and Rivers, 1996).

These and other studies confirm that teacher knowledge and expertise are critically important to student achievement. Thus it is important that teachers are assigned to teach only those courses they are fully qualified to teach.

Two recent developments in Ohio are impacting districts in the area of teacher qualifications. First, the new teacher licensure standards that became effective in 1998 are being implemented throughout the state. Second, local district report cards will report on out-of-field teaching in each district, beginning in the year 2000.

This document is designed to assist districts in implementing the new licensure standards and in ensuring that staff are assigned to classes they are qualified to teach. This document identifies both the existing certification areas and the new licensure areas that are required for teaching specific courses. Teachers should hold either the certificate or license identified in this document for each course they teach. Ohio Revised Code sections 3319.30 and 3319.36 prohibit districts from employing teachers without appropriate certification.

Please note that some very old certification codes (prior to 1970) are not listed in the charts. Such codes were omitted in order to minimize confusion over codes that are rarely used today. However, EMIS will continue to accept these codes as appropriate for teachers who still teach under those certificates.

In addition, not all subject areas are included in this document. We have included that vast majority of teaching areas, but some will need to be added over the coming year.

As with any complex document comprised of multiple charts and codes, there may be some omissions or misalignments. If you note any areas in which you feel there is an error, please contact us. We will continue to edit and refine this document as needed to ensure that it is accurate and helpful to districts.

For questions or comments about the EMIS codes in this document, contact Edna Kimm at ims_kimm@ode.ohio.gov. For questions or comments on the credentials required for teaching specific courses, contact Leonard Crawford via e-mail at tc_crawford@ode.ohio.gov or at the following mailing address: 65 S Front Street, Room 412, Columbus, Ohio 43215-4183.

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Subject Area—Agricultural & Environmental Sciences, Secondary & Adult Education Course Descriptions

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Agriscience 010100	The foundation course in agriculture and environmental systems.	Ag/Science	Voc	010100	Agriculture (Voc)	Voc	010100	Agriscience
Production Agriculture 010104	Instruction on the principles and practices of food production.	Agriculture/ Technology Business		010104			010104	Production Agriculture
Other Agriculture 019900	Planned experiences in agriculture for special-needs students.	Agriculture		019900 Any Ag. License			Any Ag. Certificate	Agriculture
Agribusiness 010200	Planned learning experiences that prepare students for agricultural careers through cooperative placement.	Agriculture/ Technology Business		010200			010200	Agribusiness
Animal Production & Care 010101	Instruction on the principles and practices of producing, caring for, and marketing domesticated non-food animals.	Ag/Science Business		010101			010101	Animal Production & Care
Equine Science 010131	Instruction on the principles and practices of equine science.	Ag/Science Business		010131			010131	Equine Science
Zoo Animal Production & Care 010191	Instruction on the principles and practices of zoo animal care.	Ag/Science		010191			010191	Zoo Animal Production & Care
Food Science 010400	Instruction on the principles and practices of the initial processing of food products.	Ag/Science Business		010400			010400	Food Science
Horticulture 010500	Instruction on the principles and practices of the culture of ornamental plants and vegetable crops.	Ag/Science Business		010500			100500	Horticulture
Agricultural Industrial Equipment 010300	Instruction on the operations or processes concerned with the selection, operations, maintenance, and use of agricultural power, machinery and equipment, structures and utilities, and soil and water management.	Agriculture/ Technology		010300			010300	Agricultural Industrial Equipment
Natural Resources 010600	Instruction on the theories, principles, and practices of conserving, improving, and productively managing natural resources.	Ag/Science		010600			010600 010700	Natural Resources Forestry
Environmental Management 010699	Instruction on the theories, principles, and practices related to air and water management and environmental protection and improvement.	Ag/Science		010699			010699	Environmental Management

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Subject Area—Business

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Accounting (Vocational) 140100	Maintenance and analysis of standard financial business records.	Business (Vocational)	Vocational	140550	Integrated Business	Vocational Business	149000 140100 149001 149002 149003 031399	Business Education Comprehensive Accounting Business Education without DP Programming Business Education without Shorthand Business Education without DP Programming Shorthand Intensive Office Education
Business Information Systems (Vocational) 140200	Programming and operation of technical business systems.			140550	Integrated Business		149000 140200 149002 031399	Business Education Comprehensive Business Information Systems Business Education w/o Shorthand Intensive Office Education
Administrative Office Technology (Vocational) 140300	Support operations necessary for business.			140550	Integrated Business		140300 149000 149001 149002 149003 030398 031399	Administration Office Technology Business Education Comprehensive Business Education w/o DP Prog. Business Education w/o Shorthand Business Education w/o Data Proc. Cooperative Office Education Intensive Office Education
Business Administration and Management (Vocational) 140800	Administration and management of business operations.			140550	Integrated Business		140800 149000 149001 149002 149003 031399	Business Administration and Management Business Education Comprehensive Business Education w/o DP Prog. Business Education w/o Shorthand Business Education w/o Data Proc. Intensive Office Education
Business and Management Foundations (Vocational) 140001	The foundation course in the business and management cluster of occupations.			140550 040800	Integrated Business Marketing Education		149000 149001 149002 149003 030000 030050 030300 040800	Business Education Comprehensive Business Education w/o DP Prog. VOC/BOE w/o Shorthand VOC/BOE w/o Data Proc /Shorthand Business Education Comprehensive Business Education w/o Shorthand Bookkeeping/Basic Business General Marketing
Computer Support Technology (Vocational) 144820	A tech prep combination of business and electronics.			171503 140550	Electronics Integrated Business	Vocational	140200 171503 149000 149002	Business Information Systems Electronics Business Education Comprehensive Business Education w/o Shorthand

Subject Area—Business

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Entrepreneurship-(Vocational) 990361	Exploring owning your own business.	Vocational	Any Standard Vocational	Any Standard Vocational	Any Standard Vocational	Any Standard Vocational	Any Standard Vocational	Any Standard Vocational Certificate
Employability Skills (Vocational) 990362	Work related skills for entering, competing, and advancing in a changing work world.							
Accounting/Bookkeeping 030100 **Non-Vocational**	Maintenance and analysis of standard financial business records.	Business	Vocational	140550	Integrated Business	Vocational or 7-12	030000 030050 030100 030300 030325 140100 140200 140300 140800 149000 149001 149002 149003	Comprehensive Business (7-12) Comprehensive Business w/o Shorthand Accounting Bookkeeping/Basic Business Bookkeeping/Basic Business (9-12) Accounting Business Information Systems Administration Office Technology Business Administration and Mgmt. VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand
Business English 030500 **Non-Vocational**	Enhancement of oral and written communication skills with an emphasis on grammar, punctuation and capitalization.	English or Business		140550 050145	Integrated Business Integrated Language Arts	Vocational or 7-12	030000 030050 050000 050012 149902 149001 149003	Business Education Business Education w/o Shorthand English (7-12) English (9-12) VOC/BOE w/o Shorthand VOC/BOW w/o Data Processing VOC/BOE w/o DP Shorthand
Keyboarding/Typing/Word Processing 036000 **Non-Vocational**	Transforming input into printed communication using the touch method on computers, keyboards, and similar equipment.	Business		140550	Integrated Business	Vocational or 7-12	030000 030050 033401 033455 033500 033589 033610 149000 149001 149002 149003 033456 033600 140300	Business Education Business Education w/o Shorthand Steno/Typing/Keyboarding Steno/Typing Typing Typing (K-12) Typing/Keyboarding (9-12) Comprehensive Business VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o DP Shorthand Typing Keyboarding (K-12) Typing Keyboarding Administration Office Technology

Subject Area—Business

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Intro/General Business 032300 **Non-Vocational**	Study of business operations including framework, legal aspects, start-up, financing, sales, management, and common practices.	Business	Vocational	140550 040800	Integrated Business Marketing Education	Vocational or 7-12	030000 030300 030325 040800 140300 149000 149001 149002 149003	Comprehensive Business (7-12) Bookkeeping/Basic Business Bookkeeping/Basic Business (9-12) General Marketing Administration Office Technology VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand
Notehand 033400 **Non-Vocational**	Abbreviated written communication.			140550	Integrated Business		030000 033401 033410 033455 149000 149001 140300	Comprehensive Business (7-12) Steno/Typing/Keyboarding Shorthand (9-12) Steno/Typing/Keyboarding (K-12) VOC/BOE Comp VOC/BOE w/o Data Processing Administration Office Technology
Office Practice/Filing 032800 **Non-Vocational**	Training in office practices and procedures, office technology, office environment, records management, human relations, and telephone skills.						030000 140100 140200 140300 140800 149000 149001 149002 149003 030300	Comprehensive Business (7-12) Accounting Business Information Systems Administration Office Technology Business Administration Management VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand Bookkeeping/Basic Business

Subject Area—Business

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Business Math and Machines 030500 **Non-Vocational**	Business problem solving using computation skills both with and without automated equipment.	Business or Mathematics	Vocational	140550 040800	Integrated Business General Marketing	Vocational or 7-12	030000 030050 030300 110000 040800 140100 140200 140300 140800 149000 149001 149002 149003	Business Comprehensive Business Education w/o Shorthand Bookkeeping/Basic Business Mathematics General Marketing Accounting Business Information Systems Administrative Office Technology Business Administration Management VOC /BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand
Business Law 030900 **Non-Vocational**	Legal concepts related to business.	Business		140550	Integrated Business		030000 030050 030010 140100 140200 140300 140800 149000 149001 149002 149003	Business Comprehensive Business Education w/o Shorthand Business Comprehensive (7-8) Accounting Business Information Systems Administrative Office Technology Business Administration Management VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand

Subject Area—Business

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Business Economics 031800 Non-Vocational	Science dealing with the production, distribution, and consumption of commodities.	Business	Vocational	140550 040800	Integrated Business General Marketing	Vocational or 7-12	030000 030010 030050 030300 040800 140100 140200 140300 140800 149000 149001 149002 149003	Business Comprehensive Business Comprehensive (7-8) Business Education w/o Shorthand Bookkeeping/Basic Business General Marketing Accounting Business Information Systems Administration Office Technology Business Administration Management VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand
Consumer Education 031500 **Non-Vocational**	Making intelligent consumer decisions regarding budgeting, housing, debt, insurance, savings, investments, consumer problems, and current consumer issues.						030050 030300 030000 150002 090000 150600 090104 040800 140100 140200 140300 140800 149000 149001 149002 149003	Business Education w/o Shorthand Bookkeeping/Basic Business Business Comprehensive Comprehensive Social Studies Home Economics Economics Consumer Education General Marketing Accounting Business Information Systems Administrative Office Technology Business Administration Management VOC/BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand
Sales 033300 Non-Vocational	Activities involved in selling goods or services.	Business					033325 030000 040800 149000 149001 149002 149003	Bookkeeping/Basic Business Business Comprehensive General Marketing VOC /BOE Comp VOC/BOE w/o Data Processing VOC/BOE w/o Shorthand VOC/BOE w/o DP Shorthand
Data Systems Non-Vocational 031700	Introduction to networking, software development, and business systems operation.			140550	Business		031700 030000 030050 140200 149000 149002	Data Processing Business Education Comprehensive Business Education w/o Shorthand Business Information Systems VOC/BOE Comp VOC/BOE w/o Shorthand

Subject Area—Marketing

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
General Marketing 040800	Activities including product/service planning, financing, production, distribution, information management, pricing, risk management, purchasing, and selling.	Marketing (Vocational)	Vocational	040800	Marketing Education	Vocational	040800 049950	General Marketing General Marketing Coop
Marketing Management 040810	Plan, organize, direct and control the functions of marketing.			040800	Marketing Education		040800 040801 049950	General Marketing Marketing Management General Marketing Coop
Entertainment Marketing 040115	Preparation for marketing in radio and TV broadcasting, performing arts, and related media.				Marketing Education		040115	Entertainment Marketing
Distribution Warehousing 041900	Preparation for a career in the physical distribution of products including freight transportation and warehousing.			040800			049950 041900 040800	General Marketing Coop Distribution Warehousing General Marketing
Arts and Communication Foundation 040001	The foundation course in the arts and communications cluster.	Vocational Art Music English Dance Physical Ed. Vocational Vocational English	MA MA AYA MA MA Vocational Vocational AYA	020012 120050 050338 080302 170700 171900 050145	Visual Arts Music Drama/Theater Dance Commercial Art Graphic Occupations Integrated Language Arts	Voc K-12 7-12 Voc 7-12 K-12 7-12 7-12 Voc Voc 7-12 7-12 K-12 7-12 7-12	040115 020012 020015 100701 120010 120050 050403 050410 170700 171900 080304 050337 050338 050347 059901	Entertainment Marketing Visual Arts (K-12) Visual Arts (7-12) Graphic Arts Music (7-12) Music (K-12) Journalism (7-12) Journalism (9-12) Commercial Art Occupations Graphic Occupations Dance Drama/Theater Drama/Theater (K-12) Drama/Theater (9-12) Comprehensive Communications
Travel and Tourism Marketing 041118	Preparation for marketing occupations in all aspects of the travel and tourism industry	Marketing (Vocational)	Vocational	041118	Marketing	Vocational	041118	Travel and Tourism Marketing

Subject Area—Career Based Intervention Programs

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Career Based Intervention Program 252525	A vocational workbased learning/academic intervention program for students (12 years of age or older; grades 7-12) with barriers to career and academic success. Students 14 and 15 years of age in a paid work experience must meet US Department of Labor WECEP requirements.	CBIP	None	610100	OWE OWA	Vocational Endorsement	179999 049998	Occupational Work Experience (OWE) Occupational Work Adjustment (OWA)

Subject Area—Career Based Intervention Programs - Reading

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Career Based Intervention Program Reading 250519	(High school credit optional in grades 9-12, not for high school credit below grade 9) Instruction designed to develop the skills necessary to perceive and react to patterns of written symbols and translate them into meaning.	Elective	None	600100 (Endorsement) and any Reading endorsement	OWE/OWA Reading	Vocational Academic Endorsement (grades 7-12)	179804 049802	OWE Reading OWA Reading

Subject Area—Career Based Intervention Programs - Mathematics

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Career Based Intervention Program Mathematics 251110	(High school credit optional in grades 9-12, not for high school credit below grade 9) Courses contain little or no significant new content from courses taken previously. Courses may focus on helping students who have taken but not yet successfully passed proficiency tests. Courses such as general mathematics, business mathematics, and consumer mathematics should be reported using the code if based upon content and skills from the middle childhood (grades 4-8) portion of the Model Competency-Based Mathematics Program. This code should be used for pre-algebra courses that address content primarily from the grades 6-8 portion of the Model Competency-Based Mathematics Program. High school core standards-led mathematics content includes: new, high school level work beyond content found in the grades 6-8 portion of the Model Competency-Based Mathematics Program, and extends understanding of mathematics drawn from topics such as algebra, geometry, data analysis and/or discrete mathematics.	Mathematics	None	600100 (Endorsement) and any Mathematics license	OWE/OWA Mathematics	Vocational Academic Endorsement grades 7-12	179800 049800	OWE Mathematics OWA Mathematics

Subject Area—Career Based Intervention Programs - Language Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Career Based Intervention Program Language Arts 250510	(High school credit optional in grades 9-12, not for high school credit below grade 9) Instruction in language structure, meaning construction, application, and the multidisciplinary nature of language. A basis for reading, writing, listening/visual literacy, and oral communications. May include literature, writing, and applied communications. Course may focus on assisting students who have not passed proficiency tests.	English or Language Arts	None	600100 (Endorsement) and Language Arts	OWE/OWA English or Language Arts	Vocational Academic Endorsement grades 7-12	179081 049801	OWE English OWA English

Subject Area— Career Based Intervention Programs - Social Studies

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Career Based Intervention Program Social Studies 251510	(High school credit optional in grades 9-12, not for high school credit below grade 9) This course is designed to immerse students in the study of social sciences. Content preparation is correlated to the six strands in the Ohio Social Studies Model. The course includes problem solving, critical thinking, and application skills. High school core standards-led social studies content includes the study of institutions and processes for decision making, knowledge of our nations past from different parts of the world, and the study of change and resources.	Social Studies	None	600100 (Endorsement) and any Social Studies license	OWE/OWA Social Studies	Vocational Academic Endorsement (grades 7-12)	179803 049812	OWE Social Studies OWA Social Studies

Subject Area—Career Based Intervention Programs - Science

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Career Based Intervention Program Science 251310	(High school credit optional in grades 9-12, not for high school credit below grade 9) Integrated school science, which develops standards-led abilities and concepts. Course should enable all students to develop standards-led fundamental understandings about scientific inquiry and abilities necessary to do scientific inquiry. Middle Childhood standards-led science content includes: life sciences, including the structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms; physical science including properties and changes in matter, motions and forces, and transfer of energy; and Earth and space science, including structure of the earth system, earth history, and Earth in the solar system. High school core standards-led science content includes: life science, including cell, molecular basis of heredity, biological evolution, interdependence of organisms, matter, energy, and organization in living systems, and behavior of organisms; physical science, including structure of atoms, structure and properties of matter, chemical reactions, motions and forces, conservation of energy and increase in disorder, interactions of energy and matter; and earth and space science, including energy in the earth system, geochemical cycles, origin and evolution of the earth system, and origin and evaluation of the universe.	Science	None	600100 (endorsement) and any Science license	OWE/OWA Science	Vocational Academic Endorsement (grades 7-12)	179805 049810	OWE Science OWA Science

Subject Area—Computer Technology

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Information Technology 290100	Computer literacy; use of applications such as word processing, database, and spreadsheet; desktop publishing; use of Internet research and communication; evaluation of hardware and software; other kinds of technology concepts and skills.	Computer/ Technology	Computer/ Technology Endorsement	290100	Computer/Technology	7-12 K-12 Voc Voc Voc Voc Voc 7-12 7-12 Endorsement	111700 111750 140200 140300 140800 149000 149002 030000 030050 031700	Computer Science 7-12. Computer Science K-12 Business Information Systems Administrative Office Technology Business Administration Management VOC/BOE Comp VOC/BOE w/o Shorthand Comprehensive Business (7-12) Business Education w/o Shorthand Data Processing
Computer Graphics 290150	Computer design is explored to develop understanding of the techniques, processes, and possibilities of electronic media.	Computer Science			(Note: a computer science license is currently being developed.)	7-12 K-12	111700 111750	Computer Science 7-12 Computer Science K-12
Computer Science 290200	Study and use of programming languages such as Cobol, Java, and C++; content and experiences with platforms, hardware, operating systems, and design; computer assisted design and graphics; and other computer concepts and skills.					7-12 K-12 7-12	111700 111750 140200	Computer Science 7-12 Computer Science K-12 Business Information Systems
AP Computer Science 290300	An advanced course of organized subject matter and experiences emphasized in computer science that, upon completion, grants college credit to the student.					7-12 K-12 7-12	111700 111750 140200	Computer Science 7-12 Computer Science K-12 Business Information Systems

Subject Area—Education of the Handicapped

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Gifted/Talented (K-12) 196200	Appropriate educational experiences for pupils identified as being gifted in the following areas: superior cognitive ability; specific academic ability; creative thinking ability; and/or performing arts ability.		Intervention Specialist	196210	Gifted	Any Standard Certificate	196210	Gifted/Talented
Multihandicapped (Other than deaf-blind) 192060	A severe impairment and/or such concomitant impairments that the child's educational problems make it impossible to accommodate his/her needs in any program but a program for multihandicapped children. (This definition may include deaf; blind; autistic; and moderately, severely, or profoundly developmentally handicapped children.)			196142	Moderate/Intensive	EH SE SP	196060, 196145, 196150, 192060, 196060, 196120, 196125, 196145, 196150, 192060, 196060, 196120, 196125, 196145, 196150	Multihandicapped K-12; MSPR Multihandicapped
Deaf-Blind 196520	Concomitant hearing and visual impairments, the combination of which causes such severe communications and other developmental and educational problems that they cannot be accommodated in special education programs solely for deaf or blind children.			196140 196142	Mild/Moderate Moderate/Intensive	EH SE SP		Any handicapped validation
Hearing Handicapped 196070	A hearing impairment, whether permanent or fluctuating, which adversely affects a child's educational performance but which is not included under the definition of "deaf."			196115	Hearing Impaired	EH SE SE	196070 196000, 196010, 196015, 196070, 196000, 196010,	Deaf/Hearing Hearing Handicapped Hard of Hearing Deaf
Visually Handicapped 196110	A visual impairment which, even with correction, adversely affects a child's educational performance. The term includes both partially seeing and blind children. 6111 Home Instruction: Home instruction is an individualized special education program provided in accordance with an IEP to a child with disabilities which prevent the child from attending a regular or special education program even with the aid of special transportation.			196110	Visually Impaired	EH SE SP	196110 196040, 196110, 196110	Visual Handicapped Part-Sighted

Subject Area—Education of the Handicapped

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Orthopedically Handicapped 196080	A severe orthopedic impairment which adversely affects a child's educational performance. The term includes impairments caused by congenital anomaly (e.g., club-foot, spina bifida, absence of some member), impairments caused by disease (e.g., poliomyelitis, muscular dystrophy, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns which cause contractures).		Intervention Specialist	196140 196142	Mild/Moderate Moderate/Intensive	Any SP, EH, or SE	196080	Orthopedically Handicapped
Other Health Handicapped 196530	Limited strength, vitality or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affects a child's educational performance.			196140 196142	Mild/Moderate Moderate/Intensive	Any EH	196080	Orthopedically Handicapped
Severe Behavior Handicapped 196061	A condition exhibiting one or more of following characteristics over a long period of time and to a marked degree, which adversely affects educational performance: (1) an inability to learn, which cannot be explained by intellectual, sensory, or health factors; (2) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (3) inappropriate types of behavior or feelings under normal circumstances; (4) general pervasive mood of unhappiness or depression; or (5) a tendency to develop physical symptoms or fears associated with personal or school problems. This category does not include children who are socially maladjusted, unless it is determined that they are severe behavior handicapped.			196140 196142	Mild/Moderate Moderate/Intensive	EH SE SP	196050 196050, 196230, 196050, 196230,	LD/BD Severe Behavior Handicapped LD/BD

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Subject Area—Education of the Handicapped

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Developmentally Handicapped 196120	Significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior manifested during the developmental period, which adversely affects a child's educational performance.		Intervention Specialist	196140	Mild/Moderate	EH SE SP	190125, 192060 196060, 196120 196125, 196145 196150 196120 196120, 196150 196925, 192060 196120, 196150 196125	Developmentally Handicapped Multi-Handicapped; MSPR Multi-Handicapped
Specific Learning Disabled 196230	A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps; of mental retardation; of emotional disturbance; or of environmental, cultural, or economic disadvantage.			196140	Mild/Moderate	EH SE SP	196085, 196230 196085, 196230 196085, 196230	Specific LD LD/BD K-12
Early Education of the Handicapped 196095	Special Education programs and related services for children below five years of age.		Early Childhood Intervention Specialist	196095	Early Childhood Intervention Specialist	PK EH	196095	Early Education of Handicapped Endorsement

Subject Area—Education of the Handicapped

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Home Instruction 196111	Home instruction is an individualized special education program provided in accordance with an IEP to a child with disabilities which prevent the child from attending a regular or special education program even with the aid of special transportation.		Intervention Specialist	196140 196142 196115 196110	Any	ED EH SE SP LP	Any Education of the Handicapped Code	Any Education of the Handicapped Area
Speech Handicapped 196510	A communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational performance.		Professional Pupil Services	270400	Speech/Language Pathologist		196130 196135	School Speech - Language Pathologist Speech/Hearing Therapist

Subject Area—Integrated English/Language Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Integrated Language Arts/English 050001	Instruction in language structure, meaning construction, application, and the multidisciplinary nature of language. A basis for reading, writing, listening/visual literacy, and oral communications.	English or Language Arts	AYA	050145	Integrated Language Arts	7-12 7-12 7-12	050000 050012 059901	English (7-12) English (9-12) Comprehensive Communications (7-12)
		English or Language Arts	AYA MC	050145 050150 (9th only)		7-12 7-12 7-12 4-9	050000 059901 050012 050150 (9th only)	English Comprehensive Communications English (9-12) Language Arts and Reading (4-9)
	Students enrolled in grades 4-8 only.	None	MC	050150		1-8 4-9 K-8 1-8	150950 150150 180106 180100	All Communications 7-8 Language Arts and Reading (4-9) K-8 1-8
Refresher English 050014	This course is designed to immerse students in literature and writing. It is especially useful for students who have not passed the proficiency tests or for non-native speakers of English.	English	AYA	050145		7-12 7-12 7-12 7-12	050000 059901 050012 059950	English (7-12) Comprehensive Communications (7-12) English (9-12) All Communications 7-8
Remedial Reading 050119	This course is designed to provide special assistance in the development of the reading processes for students who cannot construct meaning from what they read.	Elective (9-12 only)	AYA	059902 050145 050150 (9th only)	Integrated Language Arts or Reading Endorsement	K-12 K-12 K-12 K-12 7-12	050110 059910 059902 050199 050901	Reading Reading Reading (K-12) Remedial Reading Comprehensive Communications

Subject Area—Integrated English/Language Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Reading 059902	Instruction designed to develop the skills necessary to perceive and react to patterns of written symbols and translate them into meaning.	Elective			Integrated Language Arts or Reading Endorsement			
	Students enrolled in grades 9-12 only.		AYA	050145 059902		7-12 K-12 7-12 K-12 7-12	059910 059902 059901 050199 059960	Comprehensive Communications (9-12) Reading (K-12) Comprehensive Communications (7-12) Remedial Reading Reading (7-12)
	Students enrolled in grades 4-9 only.	None	MC	050150 059902		4-9 K-12 K-12 7-12 K-8 K-8 1-8	050150 059910 059902 059950 059970 180106 180100	MC Language Arts & Reading Reading (K-12) Reading (K-12) Comprehensive Communications (7-8) Reading (K-8) K-8 1-8
Business English 030600	The study of oral and written language as it applies to business	English or Business	AYA	050145 140550	Integrated Language Arts Vocational Business	7-12 7-12 7-12 7-12 7-12 Voc Voc Voc	059901 050000 050012 030000 030050 149003 149001 149002	Comprehensive Communications (7-12) English (7-12) English (9-12) Business Comprehensive (7-12) Bus w/o Shorthand Bus w/o Data Processing Business w/o DP Programming Business w/o Shorthand
Grammar and Usage 050220	This course emphasizes the editing phase of the writing process, providing for students a variety of strategies, handbooks, etc., for refining and editing their own writing. Students will write frequently and work cooperatively to edit their writing.	English	AYA	050145 050150 (9th only)	Integrated Language Arts	7-12 7-12 7-12	050000 050012 059901	English (7-12) English (9-12) Comprehensive Communications (7-12)

Subject Area—Integrated English/Language Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Literature 050300	The study of print materials which have noteworthy content and excellence of style. May be identified by country, type, and/or period of time.	English	AYA MC	050145 050150 (9th only)	Integrated Language Arts	7-12 7-12 7-12 4-9	050000 050012 059901 050150 (9th only)	English (7-12) English (9-12) Comprehensive Communications (7-12) Language Arts and Reading (4-9)
Composition 050400	Students will develop their writing with a focus on expository and persuasive techniques. Journals will be kept and portfolios will be maintained throughout the class.	English	AYA MC	050145 050150 (9th only)	Integrated Language Arts	7-12 7-12 7-12 4-9	050000 050012 059901 050150 (9th only)	English (7-12) English (9-12) Comprehensive Communications (7-12) Language Arts and Reading (4-9)
Journalism 050403	This course includes the study and practice of writing, editing, and publishing newspapers and periodicals.	English	AYA MC	050145 050150 (9th only)	Integrated Language Arts	7-12 7-12 7-12 4-9	050410 050403 059901 050150 (9th only)	Journalism (9-12) Journalism (7-12) Comprehensive Communications (7-12) Language Arts and Reading (4-9)
Newspaper/Yearbook 050439	This course explores writing for a student audience; centering on the production of the newspaper or yearbook. students work through all phases of publishing, including advertising, finances, research, writing, and desktop publishing.	English	AYA	050145	Integrated Language Arts	7-12 7-12 7-12	050410 050403 059901	Journalism (9-12) Journalism (7-12) Communications (7-12)
		if no credit earned	Any Teaching License	Any Teaching License	Any Teaching License	7-12	Any Teaching Certificate	Any Teaching Certificate
Speech 050500	Subject matter and experience in speech covers a wide spectrum of studies and activities from the scientific (voice science), through the humanistic (rhetoric), and from the behavioral sciences (group dynamics) to the artistic (oral interpretation of literature).	English	AYA	050145	Integrated Language Arts	7-12 7-12 7-12 7-12	059950 059901 050504 050530	All Communications (7-8) Communications (7-12) Speech/Communications (7-12) Speech/Communications (9-12)
Applied Communications 050545	Students will practice the communication skills of reading, writing, listening, and speaking. Especially in areas applicable to their chosen vocations.	English	AYA	050145	Integrated Language Arts	7-12	059901	Communications (7-12)

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Subject Area—Integrated English/Language Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Dramatic Arts 050600	Subject matter and experiences are concerned with a wide range of studies and activities including playwriting, dramatic literature, scenic design, acting, directing, and the supporting arts and crafts of the theater and of selected aspects of radio, television, and film.	Elective		050338	Drama/Theater	7-12 7-12 K-12 7-12 7-12 7-12 7-12 7-12 K-12 7-12 7-12	050500 050504 050505 050510 059904 050600 059901 050337 050338 050347 050012	Speech Speech/Communications (7-12) Speech (K-12) Speech (7-12) Communications (7-12) Dramatics Comprehensive Communications (7-12) Drama/Theater Drama/Theater (K-12) Drama/Theater (9-12) English (9-12)
AP - English 059912	This advanced course consists of organized subject matter and expenences emphasized in English that, upon successful completion, grants college credit to the student.	English	AYA	050145	Integrated Language Arts	7-12 7-12 7-12	050000 059901 050012	English (7-12) Comprehensive Communications (7-12) English (9-12)

Subject Area—Family and Consumer Sciences

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Middle School Work and Family Life (7-9) 090185	Helps middle school students develop self-responsibility and competence dealing with the practical problems of early adolescence. Content is drawn from two to four content areas: Creating a Self-Identity, Relating to Others, Managing Resources, and Becoming Independent.	None	Voc	090104	Family & Consumer Sciences	Voc HS	090104 180100 180106 230000	Home Economics— Consumer Homemaking Education Elementary 1-8 Kindergarten-Elementary K-8 Home Economics
Impact (7-9) 090195	Helps middle school students who are at risk of dropping out of school develop self-responsibility and competence dealing with the practical problems of early adolescence. Content areas include: Creating a Self-Identity, Relating to Others, Managing Resources, and Becoming Independent.							
Personal Development (9-12) 090101	Instruction focusing on practical problems related to taking responsibility for self and others, building self-esteem, building relationships with family and others, managing stress and conflict, and planning for future careers.	Voc			Family & Consumer Sciences	Voc HS	090104 230000	Home Economics— Consumer Homemaking Education Home Economics
Parenting (9-12) 090102	Instruction focusing on practical problems related to parenting roles and responsibilities; taking responsibility for personal growth within the parenting role; preparing for parenthood; meeting developmental needs of children and adolescents; building positive parent-child relationships; using guidance and discipline to promote self-discipline, self-esteem, and socially responsible behavior in children and adolescents, accessing sources of parenting information, support, and assistance; and planning ways that families and society can share in nurturing children and adolescents.							

Subject Area—Family and Consumer Sciences

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Family Relations (9-12) 090106	Instruction focusing on practical problems related to nurturing human development throughout the life span; forming one's own family; building and maintaining healthy family relationships; developing positive communication patterns; dealing effectively with family stresses, conflicts, and crises; managing work and family roles and responsibilities, and responding to social forces that influence families.	Voc	Voc	090104	Family & Consumer Sciences	Voc HS	090104 230000	Home Economics– Consumer Homemaking Education Home Economics
Nutrition and Wellness (9-12) 090107	Instruction focusing on practical problems related to making choices that promote wellness and good health, evaluating and controlling influences on food choices, obtaining and storing food, preparing and serving nutritious meals and snacks, and selecting and using equipment for food preparation.							
Resource Management (9-12) 090108	Instruction focusing on practical problems related to managing resources to achieve personal and family goals, making informed consumer choices; creating and maintaining a living environment; selecting, obtaining and maintaining clothing; making food choices; and preparing and serving nutritious food.							
Life Planning (9-12) 090111	Instruction focusing on practical problems related to developing a life-management plan for life beyond high school, caring for self and others, building and maintaining constructive interpersonal relationships and strong functional families, planning to assure career success, and coordinating personal and career responsibilities.							

Subject Area—Family and Consumer Sciences

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Life Planning/ Mentorship (9-12) 090112	Life Planning course with a mentorship experience attached. May be offered to students in place of Life Planning. Student experience must include local documentation of OCAP competency achievement and follow established guidelines for program design. (Contact Division of Vocational and Career Education, Family and Consumer Sciences at 614-466-3046 for guidelines.) 60-239 student instructional hours per class required.	Voc	Voc	090104	Family & Consumer Sciences	Voc HS	090104 230000	Home Economics–Consumer Homemaking Education Home Economics
GRADS - Class Structure 090194 GRADS - Alternative Structure 090193 GRADS - Minimum Intervention/Follow-up 090192	An in-school instructional program for pregnant and parenting students. Promotes personal growth, educational competence, and economic self-sufficiency as socially responsible members of society. The objectives are for students to remain in school, have healthy pregnancies and healthy babies, learn practical parenting and child-development skills, gain orientation to work, set goals toward balancing work and family, and delay subsequent pregnancies.							
Early Childhood Education and Care 090201	Preparation for employment in child care and guidance. Includes instruction and experiences to develop competencies in teaching and guiding young children. Areas of study include promoting physical, intellectual, social, and emotional growth and development in children; creating a safe, healthy learning environment; program operations in early childhood education and care; promoting positive and productive relationships with families; law, regulations, and policies related to child care services and maintenance of child care environments.			090201	Job Training - Early Childhood Education and Care		090201	Job-Training - Early Childhood Education and Care

Subject Area—Family and Consumer Sciences

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Fashion, Clothing and Interiors, Production and Services 090202	Preparation for employment in fashion and clothing or in interior design and decorating. The fashion and clothing program includes instruction and experiences to develop competencies in textiles, clothing selection, fashion sales and merchandising, dry-cleaning, laundry, construction and alterations. The interior design and decorating program includes instruction in principles of art and design, interior decorating, production of home furnishings, window and floor treatments, home accessories, floor plans and sales and merchandising.	Voc	Voc	090202	Job-Training– Fashion, Clothing, and Interiors Production and Services	Voc	090202	Job Training– Fashion, Clothing and Interiors Production and Services
If Interiors only 090204	The interior design and decorating program includes instruction in principles of art and design, interior decorating, production of home furnishings, window and floor treatments, home accessories, floor plans and sales and merchandising.						090204	Job Training–Interiors
Culinary Arts & Food Service Management 090203	Preparation for employment in managerial, production and service jobs in a variety of food service and/or baking operations. Includes instruction and experiences to develop competencies in the selection, storage, purchase, preparation and serving of goods and food products, the production of bakery products, safety and sanitation procedures, use and care of commercial equipment, serving techniques, and management of food establishments.			090203	Job Training–Culinary & Food Service Management		090203	Job-Training - Culinary & Food Service Management
If Baking only 090223	The baking program includes production of bakery products, safety and sanitation procedures, and use and care of commercial equipment.						090223	Job Training– Baking

Subject Area—Family and Consumer Sciences

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Hotels and Resorts 090205	Preparation for employment in service and management occupations in the area of hospitality, lodging and facility care. Includes instruction and experiences to develop competencies in hospitality management and services, lodging services, guest relations, hotel security, guest and room services, environmental services, meeting and banquet services, and laundry and linen services.	Voc	Voc	090205	Job Training- Hotels and Resorts	Voc	090205 090660	Job-Training - Hotels and Resorts Job Training - Family and Consumer Sciences Multi-Area Coop
Family and Consumer Sciences Multi-Area Coop 090290	The Family and Consumer Sciences cooperative work experience includes a combination of two or three of the family and consumer sciences job training program options.			090660	Job Training– Family and Consumer Sciences Multi Area Coop		090660	Job Training - Family and Consumer Sciences Multi-Area Coop
Human Resources/ Services Foundation 090001	A career pathway foundations course to be taken early in a series of academic, technological, employability and occupational courses leading to one of the Human Resources/Services career majors.			090104 090660 090201	Family & Consumer Sciences Job Training– Family & Consumer Sciences Multi-Area Coop Job Training–Early Childhood Education and Care		090104 090660 090201	Home Economics-Consumer Homemaking Education Job-Training Family and Consumer Sciences Multi-Area Job-Training Early Childhood Education and Care
Family and Consumer Sciences 230000 Non-Vocational	Instruction focusing on content from a combination of the various areas of family and consumer sciences and emphasizes basic principles and interrelationships among these areas.			090104	Family & Consumer Sciences		090104 230000	Home Economics-Consumer Homemaking Education Home Economics
Clothing and Textiles 230100 Non-Vocational	Instruction focusing on the nature, acquisition, and use of clothing, including the significance of clothing to the individual and family.							
Foods and Nutrition 231040 Non-Vocational	Instruction focusing on food and its role in personal and family living, including the basic principles of health, nutrition, food management, and economics.							

Subject Area—Family and Consumer Sciences

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Child Development and Parenting 230200 Non-Vocational	Instruction focusing on children -- their physical, mental, emotional, and social growth and development -- and their care and guidance.	Voc	Voc	090104	Family & Consumer Sciences	Voc HS	090104 230000	Home Economics-Consumer Homemaking Education Home Economics
Consumer Education 230300 Non-Vocational	Instruction focusing on consumer education as it relates to the management of a home and to the welfare of family members.							
Family Living 230500 Non-Vocational	Instruction focusing on human development through the life cycle and family relationships.							
Housing and Home Furnishings 230600 Non-Vocational	Instruction focusing on living environments, choice of residence, equipping and furnishing the home.							

Subject Area—Foreign Language — Multi-Age

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Arabic 060101	The language, literature and culture of the Arabian world.	Arabic	MA	060101	Arabic	K-12	060101	Arabic (K-12)
Chinese 060102	The language, literature, and culture of the ancient Chinese world.	Chinese		060102	Chinese	7-12 K-12	065002 060102	Chinese (7-12) Chinese (K-12)
Greek 060103	The language, literature, and culture of the ancient Greek world.	Greek		060150	Greek	7-12 K-12	065040 060150	Greek (7-12) Greek (K-12)
Hebrew 060104	The language, literature, and culture of the ancient Hebrew world.	Hebrew		060135	Hebrew	7-12 K-12	065003 060135	Hebrew (7-12) Hebrew (K-12)
Latin 060107	The language, literature, and culture of the ancient Roman world.	Latin		060107	Latin	7-12 K-12	065005 060107	Latin (7-12) Latin (K-12)
AP-Latin 069922	An advanced course in the language, literature, and culture of the ancient Roman world that upon successful completion, grants college credit to the student.	AP-Latin		060107	AP-Latin	7-12 K-12	065005 060107	AP-Latin (7-12) AP-Latin (K-12)
Russian 060218	The language, literature, and culture of the Russian-speaking world.	Russian		060625	Russian	7-12 K-12	066090- 060625	Russian (7-12) Russian (K-12)
Swahili 060221	The Bantu language used as a medium of communication by the peoples of eastern and central Africa.	Swahili		060225	Swahili	7-12 K-12	065021 060225	Swahili (7-12) Swahili (K-12)
Czech 060227	The language, literature, and culture of the Czech-speaking people.	Czech		060227	Czech	7-12 K-12	066005 060227	Czech (7-12) Czech (7-12)
French 060230	The language, literature, and culture of the French-speaking people.	French		060230	French	7-12 K-12	066008 060230	French (7-12) French (K-12)
AP-French 069914	An advanced course in the language, literature, and culture of the French-speaking people that, upon successful completion, grants college credit to the student.	AP-French		060230	AP-French	7-12 K-12	066008 060230	AP-French (7-12) AP-French (K-12)

Subject Area—Foreign Language — Multi-Age

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
German 060235	The language, literature, and culture of the German-speaking people.	German	MA	060235	German	7-12 K-12	066009 060235	German (7-12) German (K-12)
AP-German 069916	An advanced course in the language, literature, and culture of the German-speaking people that, upon successful completion, grants college credit to the student.	AP-German		060235	AP-German	7-12 K-12	066009 060235	AP-German (7-12) AP-German (K-12)
Italian 060245	The language, literature, and culture of the Italian-speaking people.	Italian		060245	Italian	7-12 K-12	066013 060245	Italian (7-12) Italian (K-12)
Japanese 060250	The language, literature, and culture of the Japanese-speaking people.	Japanese		060250	Japanese	7-12 K-12	066014 060250	Japanese (7-12) Japanese (K-12)
Polish 060255	The language, literature, and culture of the Polish-speaking people.	Polish		060255	Polish	7-12 K-12	066016 060255	Polish (7-12) Polish (K-12)
Spanish 060265	The language, literature, and culture of the Spanish-speaking people.	Spanish		060265	Spanish	7-12 K-12	066019 060625	Spanish (7-12) Spanish (K-12)
AP-Spanish 069930	An advanced course in the language, literature, and culture of the Spanish-speaking people that, upon successful completion, grants college credit to the student.	AP-Spanish		060265	AP-Spanish	7-12 K-12	066019 060265	AP-Spanish (7-12) AP-Spanish (K-12)
TESOL 060207	The study of the language, literature, and culture of the English-speaking people by individuals whose primary language is not English.			(Endorsement) 050275	TESOL		Endorsement 050275 050274	TESOL ESL
American Sign Language 061050	The study of the visual-gestural language used by deaf people in the United States and part of Canada. ASL has its own culture, grammar, and vocabulary; is produced by using the hands, face, and body; and is not derived from any spoken language.	Foreign Language		050090	American Sign Language			

Subject Area—Health Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Health Education 260101	Educational activities that promote understanding, attitudes, and practices consistent with individual, family, and community health needs.	Health	MA	080115	Health	7-12 7-12 K-12	080100 080101 080115	Health Education (7-12) Health Education (7-12) Health Education (K-12)
Dental Health Education 260840	A combination of subject matter and experiences designed to promote understanding, attitudes, and practices pertaining to teeth and oral health.					7-12 7-12 7-12 K-12	080103 080100 080101 080115	Dental Health Education Health Education (7-12) Health Education (7-12) Health Education (K-12)
Substance Abuse Prevention 260150	Subject matter and learning experiences which address drug, alcohol, and tobacco abuse situations including prevention, intervention, discipline, and community relations available to the pupil and to the family.					7-12 7-12 7-12 7-12 K-12	080104 080150 080100 080101 080115	Drug Education (7-12) Substance Abuse (7-12) Health Education (7-12) Health Education (7-12) Health Education (K-12)
Safety/First Aid/CPR 260200	Subject matter and learning experiences concerned with the developing in individuals an awareness and understanding of hazards of everyday living, and the knowledge, habits, attitudes, and skills which will enable them to function at an optimum level in the presence of hazards.					7-12 7-12 K-12	080100 080101 080115	Health Education (7-12) Health Education (7-12) Health Education (K-12)
Sports Medicine 260410	Educational activities concerned with the effects of sports and exercise on health and fitness and with the prevention and treatment of athletic injuries.				Health Physical Education	7-12 7-12 7-12 K-12 7-12 K-12	080410 080100 080101 080115 080810 080305	Sports Medicine Health Education (7-12) Health Education (7-12) Health Education (K-12) Physical Education (7-12) Physical Education (K-12)

Subject Area—Secondary Health Occupations

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Code	Licensure Area
Foundation for Health Occupation 070001	A 9th and/or 10th grade career pathway foundation course that is a component of a series of academic, technological, employability and occupational courses leading to one of the Health Services career majors. (Revised 5-13-98)	Vocational	Voc	070998 079960 070904 070303 070302 079950 070410	Diversified Health Occupations (DHO) Diversified Cooperative Health Occupations (DCHO) Medical Assistant Nurse Assistant Practical (Vocational) Nurse PN Coordinator Fitness Aide/Athletic Trainer Assistant	Voc	070998 079960 070904 070303 070302 079950 070410	Diversified Health Occupations (DHO) Diversified Cooperative Health Occupations (DCHO) Medical Assistant Nurse Assistant Practical (Vocational) Nurse PN Coordinator Fitness Aide/Athletic Trainer Assistant
Dental Assistant 070101	A combination of subject matter and experiences designed to prepare a person to assist the dentist at the chair-side in the dentist operatory, perform reception and clerical functions, and carry out selected dental laboratory work. Instruction includes infection control and hazards management, emergency procedures, preventive dental assisting procedures, chair-side assistance, dental specialties, dental laboratory procedures, office procedures, radiographic procedures, and professionalism. (Revised 8-18-98)			070101	Dental Assisting		070101	Dental Assistant
Dental Laboratory Technology 070103	A combination of subject matter and experiences designed to prepare a person to execute work in producing restorative appliances require for the oral health of the patient, as authorized by a dentist.			070103	Dental Laboratory Technology		070103	Dental Laboratory Technology
Medical Laboratory Technology 070203	A combination of subject matter and experiences organized to prepare a person to work under the supervision of medical technologist, clinical pathologist, or physician to perform routine clinical laboratory procedures and specimen collection procedures, including phlebotomy techniques.			070203	Medical Laboratory Technology		070203	Medical Laboratory Technology
Phlebotomy 070204	A combination of subject matter and experiences designed to prepare an individual to collect, process, handle, and store blood specimens, under the supervision of a medical technologist, clinical pathologist, or physician, which leads to a recognized, portable credential as a phlebotomist. This program is designed as a senior year only program. (Revised 8-18-98)			070204	Phlebotomy		070204	Phlebotomy

Subject Area—Secondary Health Occupations

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Practical (Vocational) Nurse 070302	A combination of subject matter and supervised clinical experiences designed to prepare a person to give direct nursing care under the supervision of a registered nurse, licensed physician, or dentist. Instruction includes safety and infection control, first aid, and CPR, legal and ethical responsibilities, coordinated care, goal-oriented care, environmental safety, treatments and procedures, physiological adaptation, mobility, comfort, basic care, psychosocial adaptation, growth and development, prevention and early treatment of disease, and reduction of risk potential. (Revised 5-13-98)	Vocational	Voc	070302 079950	Practical (Vocational) Nurse PN Coordinator	Voc	070302 079950	Practical (Vocational) Nurse PN Coordinator
Nurse Assistant 070303	A combination of subject matter and experiences designed to prepare a person to perform routine tasks involved in the care of individuals receiving nursing service under the supervision of a nurse. The program is approved as NATCEP by the Ohio Department of Health. (Revised 5-13-98)			070303 070998	Nurse Assistant DHO Instructor		070303 070998	Nurse Assistant DHO Instructor
Surgical Technician 070305	A combination of subject matter and experiences designed to prepare a person to serve as a general assistant on the surgical team in the operating suite. (Revised 5-13-98)			070305	Surgical Technician		070305	Surgical Technician
Home Health Aide 070307	A combination of subject matter and experiences designed to prepare a person to assist the elderly, convalescent, or handicapped in their homes, and to provide for their daily living needs, under a plan of care supervised by a nurse. The program must include TCEP for Home Health Aide based on Model Curriculum and Teaching Guide for the Instruction of the Home Health Aide by the National Association for Home Care. (Revised 5-13-98)			070307 070998 070303	Home Health Aide DHO Instructor Nurse Assistant (Aide)		070307 070998 070303	Home Health Aide DHO Instructor Nurse Assistant (Aide)

Subject Area—Secondary Health Occupations

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Fitness/Athletic Trainer Assistant 070410	A combination of subject matter and laboratory or supervised clinical experiences designed to prepare persons to perform routine tasks designated by a licensed athletic trainer related to the operation of athletic training. Curriculum content includes nutrition, health continuum, exercise physiology, infection control, anatomy and physiology, first aid and safety, psychology and exercise techniques. Individuals may be employed in health spas, fitness centers, and/or sporting facilities.	Vocational	Voc	070410	Fitness/Athletic Trainer Assistant	Voc	070410	Fitness/Athletic Trainer Assistant
Optometric Occupations 070603	A combination of subject matter and experiences designed to train a person to prepare, assemble, and/or fit corrective lenses prescribed by a physician or optometrist. These occupations may include optical surfacing, optical finishing, optical stylist, and/or optical dispensing.			070603	Optometric Occupations		070603	Optometric Occupations
Medical Assistant 070904	A combination of subject matter and experiences designed to prepare a person to perform functions and follow procedures concerned with the diagnosis and treatment of patients under the supervision of a physician in a physician's office or clinic. Instruction covers physical examinations, laboratory tests, infection control and hazard material management, quality assurance, medical ethics, patient education, medical emergencies, general office procedures, insurance, and medications. (Revised 5-13-98)			070904	Medical Assistant		070904	Medical Assistant
Community Health Aide 070906	A combination of subject matter and experiences designed to prepare a person to serve as liaison between professional health workers and the recipients of health services. Instruction emphasizes basic understanding of biology, communicable diseases, environmental health, personal hygiene, infants, medicines, and family and community resources.			070906	Community Health Aide		070906	Community Health Aide

Subject Area—Secondary Health Occupations

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Pharmacy Assistant 070912	A combination of subject matter and experiences designed to prepare a person to work in a pharmacy under the supervision of a pharmacist. Instruction includes pharmacy law and ethics, pharmaceutical calculations, pharmacy operations, compounding, and pharmacology. (Revised 5-13-98)	Vocational	Voc	070912	Pharmacy Assistant	Voc	070912	Pharmacy Assistant
Health Unit Coordinator 070913	Instruction and experiences designed to prepare a person to manage components of non-patient care activities in health care facilities. The unit coordinator transcribes physician's orders, acts as liaison with other departments and agencies providing patient services, use communication devices such as telecommunication systems, computer terminals and fax machines, responsible for the accuracy and completeness of records, delivery of messages, and prompt reporting of needed repairs or services. (Revised 5-13-98)			070913	Health Unit Coordinator		070913	Health Unit Coordinator
Patient Care Technician 070994	A combination of subject matter and laboratory experiences to prepare a person for patient-care who can perform the following: the skills of nurse aide, phlebotomy, home health aide, EKG, or advanced nursing skills. Instruction includes, but not limited to, infection control and hazard material management, medical asepsis, anatomy and physiology, computer skills, medical terminology, universal employability skills, phlebotomy skills, patient rights, CPR and first aid, communication and interpersonal skills, professional ethics, documentation, EKG skills, and advanced nursing skills. (Revised 5-13-98)			070994	Patient Care Technician		070994 074820 079950 074830	Patient Care Technician Phlebotomy Exit (Tech Prep) PN Coordinator Pre-Nursing (Tech Prep)

Subject Area—Secondary Health Occupations

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Diversified Health Occupations (DHO) 070998	A combination of diversified subject matter and experiences designed to prepare a person for entry into the health field. Instruction includes emergency procedures, infection control and hazards management, legal, ethical, and professional responsibilities, basic personal care, medical database, medical/dental procedures, laboratory-related procedures, care of the elderly, home health care, restorative duties, and office procedures. Field trips and rotations through various health agencies are a part of the planned program. Program is approved as NATCEP by the Ohio Department of Health. (Revised 5-13-98)	Vocational	Voc	070998	Diversified Health Occupations (DHO)	Voc	070998	Diversified Health Occupations (DHO)
Phlebotomy Exit (Tech Prep) 074820	An Allied Health Tech Prep Cluster targets technician-level occupations within the following areas: respiratory therapy, radiography, surgical technology, emergency medical, technology, and medical laboratory technologies. Phlebotomy is the job exit for grade 12. This clustered Tech Prep program of study prepares students for continued education and training for employment as an allied health technician. (Revised 8-18-98)			074820 070998 070302 079950	Phlebotomy Exit (Tech Prep) DHO Instructor Practical (Vocational) Nurse PN Coordinator		074820 070998 070302 079950	Phlebotomy Exit (Tech Prep) DHO Instructor Practical (Vocational) Nurse PN Coordinator
Pre-Nursing (Tech Prep) 074830	A combination of subject matter and experience designed to prepare a person to gain entry level experience in a Pre-Nursing program; includes a current knowledge of concepts, principles, processes, and skills relating to health, deviations from health, nutrition, pharmacology, communication, human development, teach-learning principles, current technology, humanities, and biological, social, and behavioral sciences. State Approved Nurses Aide is job exit for grade 12. This Tech Prep program of study prepares students for continued education in an approved nursing education program preparing for Licensure as a registered or LPN/LVN nurse. (Revised 8-18-98)			070303 070998 070302 079950	Pre-Nursing (Tech Prep) DHO Instructor Practical (Vocational) Nurse PN Coordinator		070303 070998 070302 079950	Pre-Nursing (Tech Prep) DHO Instructor Practical (Vocational) Nurse PN Coordinator

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Subject Area—Secondary Health Occupations

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Certified Health Unit Coordinator Exit (Tech Prep) 074890	An Allied Health Tech Prep Cluster targets technician-level occupations within the following areas: rehabilitation and restorative services, electrocardiography, pharmacy, and medical administrative services (including health information/medical records). Certified Health Unit Coordinator is the job exit for grade 12. This clustered Tech Prep program of study prepares students for continued education and training for employment as an allied health technician. (Revised 8-18-98)	Vocational	Voc	074890 070913 070994 070302 079950 070998 070203	Certified Health Unit Coordinator Exit (Tech Prep) Health Unit Coordinator Patient Care Tech. Practical (Vocational) Nurse PN Coordinator Diversified Health Occupations Phlebotomy Exit (Tech Prep)	Voc	070904 070998 070302 079950	Certified Health Unit Coordinator Exit (Tech Prep) Diversified Health Occupations Practical (Vocational) Nurse PN Coordinator
Diversified Cooperative Health Occupations (DCHO) 079960	A cooperative program in multi-occupational areas of health occupations.			079960	Diversified Cooperative Health Occupations (DCHO)		070303 070998 070302 079950	DCHO Coordinator Diversified Health Occupations Practical (Vocational) Nurse PN Coordinator

Subject Area—Industrial Technology/Technology Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Technology Education 102300 General Industrial Technology 100000 Industrial Technology 101325 Research and Development 101700 Technology for Children 102400	**Technology Education** A comprehensive study of the knowledge and processes necessary in designing, making, developing, producing, using, managing, and assessing of technological systems and products. Dimensions of technology include assessing impacts and consequences of technology, nature and history of technology, and connections. Technological systems and products are those systems and products that change the world around us to satisfy our needs and wants. In particular Technology Education focuses on the systems and products of the construction, manufacturing, communication, energy/power/transportation, and bio-related/chemical fields. These activities may take place in thematic units at the elementary level, general technology courses at the middle and high school levels, Tech Prep and Pathways courses at the high school level, and modules and problem-based learning integrated with mathematics, science, language arts, social studies, and arts teams at all levels.	Technology Education	MA	160610	Technology Education	K-12 7-12	101320 100005 101315 102000	Industrial Technology (K-12) Industrial Arts (K-12) Industrial Technology (7-12) Industrial Arts (7-12)

Subject Area—Industrial Technology/Technology Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Construction 100100 Home Mechanics 100800	**Construction Technology Systems** A comprehensive study of the knowledge and processes in designing, making, developing, producing, using, managing, and assessing of technological systems and products to build structures. In particular courses that are part of the construction technology systems focus on project planning, architectural design and drafting, site preparation, building the structure, and maintaining the structure.	Technology Education	MA	160610	Technology Education	K-12 7-12	101320 100005 101315 102000	Industrial Technology (K-12) Industrial Arts (K-12) Industrial Technology (7-12) Industrial Arts (7-12)
Manufacturing 101300 Industrial Crafts 100200 Metals 101410 Plastics 101500 Woods 101900 Service Industries 101800 Robotics 101350	**Manufacturing Technology Systems** A comprehensive study of the knowledge and processes in designing, making, developing, producing, using, managing, and assessing of technological systems and products in manufacturing facilities. In particular courses that are part of manufacturing technology systems focus on mechanical design and drafting, materials, and processes (including woods, metals, and plastics), production, robotics and automation systems, and specific trades/crafts.							

Subject Area—Industrial Technology/Technology Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
	Communication Technology Systems A comprehensive study of the knowledge and process in designing, making, developing, producing, using, managing, and assessing of technological systems to produce products for transferring graphic and electronic messages. Computer modeling and information technology applications are critical to all technology systems areas. In particular courses that are part of communication technology systems focus on existing and emerging information technologies for encoding, transmitting, receiving, storing, retrieving, and decoding of graphic and electronic messages.	Technology Education	MA	160610	Technology Education	K-12 7-12	101320 100005 101315 102000	Industrial Technology (K-12) Industrial Arts (K-12) Industrial Technology (7-12) Industrial Arts (7-12)

Communications 102000

Drafting 100300

Electricity/Electronics 100401

Graphic Arts 100700

Industrial Computer Applications 102500

Subject Area— Industrial Technology/Technology Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Energy/Power/Transportation 102100 Power Mechanics 101610	**Energy/Power/Transportation Technology Systems** A comprehensive study of the knowledge and process in designing, making, developing, producing, using, managing, and assessing of technological systems to produce products for the transmission of energy and power, and the transportation of goods and people. In particular technology courses focus on energy and power sources or devices, the transformation of energy and power from one form to another, the transmission of power from one point to another, and the safe use of power. In addition transportation focuses on the systems and products used to transport goods and people.	Technology Education	MA	160610	Technology Education	K-12 7-12	101320 100005 101315 102000	Industrial Technology (K-12) Industrial Arts (K-12) Industrial Technology (7-12) Industrial Arts (7-12)
103050	**Bio-Related and Chemical Technology Systems** A comprehensive study of the knowledge and process in designing, making, developing, producing, using, managing, and assessing of technological systems to produce products with bio-related and chemical applications. In particular technology courses focus on practical application of biological organism and chemical processes to make or modify products, the production process techniques related to agriculture, chemical, and medical technology products, and the human interface with technology in managing the artificial and natural environment.							

Subject Area—Library/Media

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Library Science 200700	Instruction seeks to help students understand how information is organized in school, public, and academic libraries and how to develop an effective strategy for selecting information and make use of print and/or electronic resources and equipment within the library. That information is available in a wide variety of formats; and that information is available outside the school library/media center and can be accessed electronically or through traditional methods.	Elective	Multi-Age	050675	Library/Media	7-12 K-12 7-12 7-12 K-12	050650 050675 050700 050902 050905	Library/Media (7-12) Library/Media (K-12) Library Science (7-12) Educational Media (7-12) Educational Media (K-12)
Educational Media 200902	Subject matter and experiences are concerned with the use of all teaching and learning resources, including hardware and content materials. Educational media are defined as any devices, content materials, methods, or experiences used for teaching and learning purposes. These include printed and non-printed sensory materials.	Elective	MA					

Subject Area—Mathematics

Subject Code and Title	Subject Definition	Subject Credit	Licensure Type	License Code	Licensure Area	Certificate Type	Certificate Type	Certificate Area
Algebra I 110301	In-depth study of algebraic concepts and processes to represent and solve problems that involve variable quantities. Includes using and relating graphical and symbolic representations and techniques.	Math	AYA MC	110094 110100 (grade 9 only)	Integrated Mathematics Middle Childhood Math (4-9)	7-12 4-9	110000 110100 (grade 9 only	High School Math (7-12) Middle Grades Math (4-9)
Geometry 111200	In-depth study of two and three-dimensional geometry including representing problem situations using geometric models, deductive reasoning, and geometry from an algebraic perspective.		AYA	110094	Integrated Mathematics	7-12	110000	7-12 High School Math
Algebra II 110302	Further study of algebraic concepts and processes such as matrices, vectors, and logarithmic and trigonometric functions.							
Advanced Mathematics 110099	The study of advanced topics in functions, algebra, geometry, and data analysis including the conceptual underpinnings of calculus.							
Discrete Mathematics 111300	The study of mathematical properties of sets and systems that have a countable number of elements including applications of systematic counting techniques and algorithmic thinking to represent, analyze, and solve problems.							
Probability and Statistics 111500	In-depth study of probability, data analysis, and statistics including applying the concept of random variables to generate and interpret probability distributions, transforming data to aid in interpretation and prediction, and testing hypotheses using appropnate statistics.							

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Subject Area—Mathematics

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certification Area
Trigonometry 111600	In-depth study of trigonometric and circular functions including modeling, graphing, and connecting to polar coordinates, complex numbers, and series.	Math	AYA	110094	integrated Mathematics	7-12	110000	7-12 High School Math
Calculus 110600	A formal study of topics from calculus that is not associated with the Advanced Placement Program. Includes the study of limit, series, and differentiation and integration.							
Informal Mathematics I/ Algebra 112100	The first course in a four-year sequence that addresses new, high school level content through concrete models and activities with less emphasis on abstraction and symbol-manipulation. Includes courses with an algebra focus such as Basic Algebra, Informal Algebra, or Applied Algebra. Note: This code should be used for the first year of a two-year Algebra I course; e.g., Algebra IA. The Algebra I subject code should be used for the second year; e.g., Algebra IB. This code should only be used for pre-algebra courses that address new, high school level work beyond content found in the grades 6-8 portion of the Model Competency-based Mathematics Program.	Math	AYA MC	110094 110100 (7-9)	Integrated Mathematics Middle Childhood-Math (7-9)	4-9 7-12	110100 110000 (7-9)	Middle grades Math (4-9) High School Math (7-9)
Informal Mathematics II/ Geometry 112200	The second course in a four-year sequence. Includes courses with a geometry focus such as Basic Geometry, Informal Geometry, or Applied Geometry.	Math	AYA	110094	Integrated Mathematics	7-12	110000	7-12 High School Math
Informal Mathematics III 112300	The third course in a four-year sequence. Includes new, high-school level content and extends understanding of mathematics drawn from topics such as algebra, geometry, data analysis and/or discrete mathematics.							
Informal Mathematics IV 112400	The fourth course in a four-year sequence. Includes new, high-school level content and extends understanding of mathematics drawn from topics such as algebra, geometry, data analysis, discrete mathematics, and/or conceptual underpinnings of calculus.							

Subject Area—Mathematics

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certification Area
Intervention/Review Mathematics 111950	Courses contain little or no significant new content from courses taken previously. Courses may focus on helping students who have taken but not yet passed proficiency tests. Courses such as general mathematics, business mathematics, and consumer mathematics should be reported using this code if based upon content and skills from the middle childhood (grades 4-8) portion of the Model Competency-based Mathematics Program. This code should be used for pre-algebra courses that address content primarily from the grades 6-8 portion of the Model Competency-based Mathematics Program. (high school credit optional in grades 9-12, not for high school credit below grade 9)	Math	AYA MC	110094 110100 (grade 9 only)	Integrated Mathematics Middle Childhood-Math	4-9 7-12	110100 (grade 9 only) 110000	Middle Grades Math (4-9) High School Math (7-12)
Transition to College Mathematics 111850	A course designed for students in grades 11 or 12 who may have not previously been college-intending to make a transition to a college-preparatory program or study of mathematics. Content includes new topics and may revisit some previously addressed topics with increased emphasis on formalization, symbol manipulation, and mathematical structure.	Math	AYA	110094	Integrated Mathematics	7-12	110000	7-12 High School Math
AP Calculus 119950	Based upon most current Advanced Placement program syllabus for Calculus AB or Calculus BC and prepares students for Advanced Placement examination.							
AP Statistics 119550	Based upon most current Advanced Placement program and prepares students for Advanced Placement examination.							
Applied Mathematics 110500	Covers new, high-school level content through workplace, business, and consumer contexts and applications.							

Subject Area—Mathematics

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certification Area
Middle Childhood Mathematics 110100	Instruction in mathematics that addresses content in the grades 4-8 portion of Ohio's Model Competency-based Mathematics Program.	Math	MC	110100	Middle Childhood-Math (4-9)	4-9 K-8 1-8 7-12	110100 180106 180100 110000	4-9 Middle Grades Math Kindegarten-Elementary Elementary Mathematics (7-8 only)
		Math	AYA	110094 (grades 7-8 only)	Integrated Mathematics (grades 7-8 only)			

Subject Area—Music

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
General Music 120000	Organized subject matter and musical experiences consisting of an extensive and varied study of music designed for all pupils.	Music	MA	120050	Music	7-12 K-12	120010 120050	Music 7-12 Music K-12
Music Theory 120300	The study of the principles of music, including rudiments, harmony, counterpoint, form and analysis, orchestration, and skills such as sight singing, ear training, conducting, and composing.							
Vocal Music 120400	Learning experiences designed for the study of vocal repertoire and the development of vocal skills through solo and choral performance.							
Instrumental Music 120500	Learning experiences designed for the study of instrumental repertoire and the development of instrumental skills through solo and group performance.							
Music Appreciation 120800	Organized subject matter and learning experiences designed to further pupils' knowledge, comprehension, and appreciation of various types and styles of music.							
AP Music 129926	An advanced course of organized subject matter and experiences emphasized in music that, upon successful completion, grants college credit to the student.							

Subject Area—Physical Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Physical Education 080300	A comprehensive subject area which incorporates fundamental motor skills, body control and balance, physical fitness, leisure sports and game skills, cognitive skills as well as stress management skills. It develops the social, emotional l physical skills essential to a happy and healthy lifestyle.	PE	MA	080305	PE	7-12 K-12	080310 080305	Physical Education (7-12) Physical Education (K-12)
Dance 080302	Provides students with opportunities to develop and aesthetic perception of dance as an art and an understanding of the creative process, as well as to develop technical skills and kinesthetic awareness through the artistic modes of expression and response. Instruction will emphasize the basic elements of dance: time, space, and effort (weight and energy). Activities will enable students to express personal ideas, feelings and values through dance; to learn how past and present societies have expressed their values and beliefs through dance; to respond to the dance performance of others, and to develop the body as a sensitive instrument for dance.	Dance PE	MA	080302 080305	Dance PE	7-12 K-12 7-12 K-12	080302 080314 080310 080305	Dance (K-12) Dance (7-12) Physical Education (7-12) Physical Education (K-12)
Lifetime Sports 080405	Activities taught throughout the school life with emphasis on learning experiences that can be turned into healthful lifetime skills.	PE	MA	080305	PE	7-12 K-12	080310 080305	Physical Education (7-12) Physical Education (K-12)
Adapted Physical Education 080505	Adapted Physical Education is specially designed instruction in physical education. According to federal law, physical education means the development of (a) physical and motor fitness (b) fundamental motor skills and patterns; and (c) skills in aquatics, dance, and individual and group games and sports (including intramural and lifetime sports).	PE	MA	080305	Adapted Physical Education *endorsement in APE is attached to multiage license in PE	7-12 K-12	080310 080305	Adapted Physical Education Adapted Physical Education *endorsement in APE is attached to a certificate in PE

Subject Area—Physical Education

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Outdoor Education 080900	A variety of outdoor leisure and sports activities, such as fishing, archery, nature study, boating, backpacking, and similar pursuits that enhance students physical health and their understanding of the natural world.	PE	MA	080305	PE	7-12 7-12 K-12	080900 080310 080305	Outdoor Education Physical Education 7-12 Physical Education K-12

Subject Area—Science

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Science MC 131110	Integrated Middle Childhood course, which enables all students to develop standards-led fundamental abilities and concepts. Courses enable all students to develop standards-led understanding about scientific inquiry and abilities necessary to do scientific inquiry. Middle childhood standards-led science content includes: life sciences, including the structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms; physical science, including properties and changes of properties in matter, motions and forces, and transfer of energy, and earth and space science, including structure of the earth system, earth's history, and Earth in the solar system.	Science	MC	131000 132010 132020 132030 132034 102035 132036 132040 132045 132046	Middle Childhood Science Integrated Science Physical Sciences Life Sciences Life Sciences/Earth Sciences Life Sciences/Physics Life Sciences/Chemistry Earth Sciences Earth Sciences/Physics Earth Sciences/Chemistry	7-12 7-12 7-12 4-9 7-12 1-8 K-8	130000 130010 130100 130102 130175 180100 180106	Comprehensive Science (7-12) Science (7-8) General Science (7-12), Science Middle Grades (4-9) High School Comprehensive All Sciences (7-8) Elementary (1-8) Kindergarten-Elementary (K-8)
tegrated Science 32210	Integrated high school core courses, which develop standards-led fundamental abilities and concepts. Courses should enable all students to develop standards-led fundamental understandings about scientific inquiry and abilities necessary to do scientific inquiry. High school core standards-led science content includes: life sciences, including cell, molecular basis of heredity, biological evolution, interdependence of organisms, matter, energy, and organization in living systems, and behavior of organisms; physical science, including structure of atoms, structure and properties of matter, chemical reactions, motions and forces, conservation of energy and increase in disorder, interactions of energy and matter; and earth and space science, including energy in the earth system, geochemical cycles, origin and evolution of the earth system, and origin and evolution of the universe. (COURSE LEVEL element required.)	Science Biological Science Physical Science	AYA	130210 132020 132034 132035 132038 132045 132046	Integrated Science Physical Science Life Sciences/Earth Sciences Life Sciences/Physics Life Sciences/Chemistry Earth Sciences/Physics Earth Sciences/Chemistry	7-12 7-12 7-12 7-12 7-12 7-12 7-12	130000 * * * * * * * can be either 7-12 or 9-12	Comprehensive Science (7-12) Physics+Chemistry Biological Science+Earth Science Biological Science+Physics Biological Science+Chemistry Earth Science+Physics Earth Science+Chemistry

Subject Area—Science

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Physical Science 132220	Discrete high school core courses, which develop standards-led fundamental abilities and concepts. Courses should enable all students to develop standards-led fundamental understandings about scientific inquiry and abilities necessary to do scientific inquiry. The standards-led subject matter, instruction, and assessment in physical sciences includes: structure of atoms, structure and properties of matter, chemical reactions, motions and forces, conservation of energy and increase in disorder, interactions of energy and matter. (COURSE LEVEL element required.)	Science Physical Science	AYA	132010 132020 132035 132045 132048	Integrated Science Physical Sciences Life Sciences/Physics Earth Sciences/Physics Earth Sciences/ Chemistry	7-12 7-12 7-12 7-12 7-12	130000 130312 130322 130301 130302	Comprehensive Science (7-12) Chemistry (9-12) Physics (9-12) Chemistry (7-12) Physics (7-12)
Biology/Life Science 132230	Discrete high school core courses, which develop standards-led fundamental abilities and concepts. Courses should enable all students to develop standards-led fundamental understandings about scientific inquiry and abilities necessary to do scientific inquiry. The standards-led subject matter, instruction, and assessment in life sciences includes: the cell, molecular basis of heredity, biological evolution, interdependence of organisms, matter, energy, and organization in living systems, and behavior of organisms.(COURSE LEVEL element required.)	Science Biological Science	AYA	132010 132030 132034 132035 132036	Integrated Science Life Sciences Life Sciences/Earth Sciences Life Sciences/Physics Life Sciences/Chemistry	7-12 7-12 7-12	130000 130205 130200	Comprehensive Science (7-12) Biological Science (9-12) Biological Science (7-12)
Earth/Space Science 132240	Discrete high school core courses, which develop standards-led fundamental abilities and concepts. Courses should enable all students to develop standards-led fundamental understandings about scientific inquiry and abilities necessary to do scientific inquiry. The standards-led subject matter, instruction, and assessment in earth and space sciences includes: energy in the earth system, geochemical cycles, origin and evolution of the earth system, and origin and evolution of the universe. (COURSE LEVEL element required.)	Earth/Space Science Physical Science Biological Science	AYA	132010 132034 132040 132045 132046	Integrated Science Life Sciences/Earth Sciences Earth Sciences Earth Sciences/Physics Earth Sciences/Chemistry	7-12 7-12 7-12	130000 130410 130400	Comprehensive Science (7-12) Earth Science (9-12) Earth Science (7-12)

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Subject Area—Science

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Chemistry 132301	The study of the composition, structure, properties of and changes in matter, including the accompanying energy phenomena. (COURSE LEVEL element required.)	Science Physical Science	AYA	132010 132036 132046 132030	Integrated Science Life Sciences/Chemistry Earth Sciences/Chemistry Physical Science	7-12 7-12 7-12	130301 130000 130312	Chemistry (7-12) Comprehensive Science (7-12) Chemistry (9-12)
Physics 132302	The study of the branch of science that is concerned with matter and energy, including the study of the phenomena associated with mechanics, heat, wave motion, sound, electricity and magnetism, light, and atomic and nuclear structure. (COURSE LEVEL element required.)	Science Physical Science	AYA	132010 132035 132045 132030	Integrated Science Life Sciences/Physics Earth Sciences/Physics Physical Science	7-12 7-12 7-12	130302 130000 130322	Physics (7-12) Comprehensive Science (7-12) Physics (9-12)
Intervention Science 132900	Discrete high school course, which includes little or no new content from courses previously taken by students who have taken but not yet successfully passed previous administrations of the high school Science Proficiency/Graduation test. The variety of standards-led instruction and assessment strategies used in these courses are appropriate to assist student preparation in the high school Science Proficiency/Graduation Test Student Learning Outcomes Competencies, which are derived from Ohio's Model Competency-Based Science Program.	Science	AYA	132010 132030 132030 132034 132035 132036 132040 132045 132046	Integrated Science Physical Science Life Sciences Life Sciences/Earth Sciences Life Sciences/Physics Life Sciences/Chemistry Earth Sciences Earth Sciences/Physics Earth Sciences/Chemistry	7-12 7-12 7-12 7-12 7-12 7-12 7-12 7-12 7-12 7-12 7-12	130000 130100 130150 130205 130312 130322 130410 130200 130301 130302 134000	Comprehensive Science (7-12) General Science (7-12) General Science (9-12) Biological Science (9-12) Chemistry (9-12) Physics (9-12) Earth Science (9-12) Biological Science (7-12) Chemistry (7-12) Physics (7-12) Earth Science (7-12)

Subject Area— Science

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Advanced Life Voc. AgriScience 132339	Agricultural Sciences courses as defined by Vocational Education, which meet the content criteria for the Advanced Life Science as defined by Science are granted an exception for awarding whole or partial science credit.	Science Biological Science	Vocational	010100 010100 010131 010191 010500 010600 010699 010700	AgriScience Small Animal Production & Care* Equine Science* Zoo Animal Production & Care* Horticulture* Natural Resources* Environmental Management* Forestry* * in conjunction with AgriScience licensure or planned and taught in collaboration with a person or team holding the integrated science, life sciences, or life sciences/earth sciences license.	Agriculture		
AP-Biology 139904	An advanced course that adheres to the College Board guidelines for Advanced Placement Biology.	Science Biological Science	AYA	132010 132030 132034 132035 132036	Integrated Science Life Sciences Life Sciences/Earth Sciences Life Sciences/Physics Life Sciences/Chemistry	7-12 7-12 7-12	130000 130205 130200	Comprehensive Science (7-12) Biological Science (9-12) Biological Science (7-12)
AP-Physics 139908	An advanced course that adheres to the College Board guidelines for Advanced Placement Chemistry.	Science Physical Science	AYA	132010 132020 132035 132045	Integrated Science Physical Science Life Sciences/Physics Earth Sciences/Physics	7-12 7-12 7-12	130000 130322 130302	Comprehensive Science (7-12) Physics (9-12) Physics (7-12)
AP-Chemistry 139906	An advanced course that adheres to the College Board guidelines for Advanced Placement Chemistry.	Science Physical Science	AYA	132010 132020 132036 132046	Integrated Science Physical Science Life Sciences/Chemistry Earth Sciences/Chemistry	7-12 7-12 7-12	130000 130312 130302	Comprehensive Science (7-12) Chemistry (9-12) Chemistry (7-12)

Subject Area—Social Studies

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Anthropology 150100	The study of man in relation to distribution, origin, classification, and relationship of races, physical character, environmental and social relations, and culture.	Social Studies	AYA	150004	Integrated Social Studies	7-12 7-12 7-12	150150 150100 150002	Anthropology (9-12) Anthropology (7-12) Comprehensive Social Studies (7-12)
AP Economics 159910	Advanced course of organized subject matter and experiences emphasized in economics following the Advanced Placement curriculum. (Macroeconomics, microeconomics)	Social Studies	AYA	150004	Integrated Social Studies	7-12 7-12 7-12	150650 150600 150002	Economics (9-12) Economics (7-12) Comprehensive Social Studies (7-12)
AP Government Politics 159918	The study of institutions and processes through which decisions are made for a society following the Advanced Placement curriculum. (Cooperative Gov't & Politics, U.S. Gov't & Politics)	Social Studies	AYA	150004	Integrated Social Studies	7-12 7-12 7-12	151110 151100 150002	Political Science (9-12) Political Science (7-12) Comprehensive Social Studies (7-12)
AP History 159920	The study of change and continuities in the course of the human past following the Advanced Placement curriculum. (European History, U.S. History)	Social Studies	AYA	150004	Integrated Social Studies	7-12 7-12 7-12	150805 150800 150002	History (9-12) History (7-12) Comprehensive Social Studies (7-12)
Economics 150600	The study of how society uses its resources to satisfy the desires of its citizens for goods and services.	Social Studies	AYA	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 7-12 7-12	150650 150600 150002 150003	Economics (9-12) Economics (7-12) Comprehensive Social Studies (7-12) Middle Childhood Social Studies (grade 9 only)
Geography 150700	The study of spatial aspects of human existence.	Social Studies	AYA	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 7-12 7-12 4-9	150710 150700 150002 150003	Geography (9-12) Geography (7-12) Comprehensive Social Studies (7-12) Middle Grades Social Studies (grade 9 only)
Government 150300	The study of institutions and processes through which decisions are made for a society.	Social Studies	AYA MC	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 4-9	150002 151800 151110 150003	Comprehensive Social Studies (7-12) Government (7-12) Political Science (7-12) Middle Grades Social Studies (grade 9 only)
American History 150810	The study of knowledge which deals with our nation's past.	Social Studies	AYA	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 7-12 4-9	150805 150800 150002	History (9-12) History (7-12) Comprehensive Social Studies (7-12)
World History 150800	The study of knowledge which deals systematically with our past from different parts of the world.	Social Studies	AYA	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 7-12 4-9	150800 150002 150003	History (7-12) Comprehensive Social Studies Middle Grades Social Studies (grade 9 only)

Subject Area—Social Studies

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Humanities 150900	The study of cultural achievements and societal values through the integration of literature, the arts, religion, history, philosophy, and languages as well as other social studies disciplines.	Social Studies or English	AYA MC AYA	150004 150003 050145	Integrated Social Studies Middle Childhood Social Studies (grade 9 only) Integrated Language Arts	7-12 7-12 7-12 7-12 7-12 7-12 7-12	150002 150900 159901 150805 150800 150003 050000 050012	Comprehensive Social Studies (7-12) Comprehensive Humanities (7-12) Comprehensive Communications (7-12) History (9-12) History (7-12) Middle Childhood Social Studies (grade 9 only) English (7-12) English (9-12)
Psychology/Social Psychology 150205	The study of the human mind and its influence on behavior.	Social Studies	AYA	150004	Integrated Social Studies	7-12 7-12 7-12 7-12	151215 151205 151220 150002	Psychology/Sociology (7-12) Social Psychology (7-12) Social Psychology (9-12) Comprehensive Social Studies (7-12)
Social Studies (7-8) 151201	The integrated study of the social sciences and humanities. (for grades 7-8)	Social Studies	AYA MC	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 4-9	150310 150003	Comprehensive Social Studies (7-8) Middle Grades Social Studies (grade 9 only)
Sociology 151300	The study of group behavior in societies, social relationships, and social institutions.	Social Studies	AYA MC	150004 150003	Integrated Social Studies Middle Childhood Social Studies (grade 9 only)	7-12 7-12 7-12 7-12 4-9	151300 151215 150002 151205 150003	Psychology/Sociology (9-12) Psychology/Sociology (7-12) Comprehensive Social Studies (7-12) Social Psychology (7-12) Middle Grades Social Studies (grade 9 only)

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Industrial and Engineering 170001	A 9th and/or 10th grade career pathway foundations course that is a component of a series of academic, technological, employability and occupational courses leading to Industrial or Engineering career major. Revised 5/13/98. Single period semester of year-long course.	Vocational	Voc	160610	Technology Education	7-12 K-12 7-12 K-12 7-12	100000 100005 101315 101320 102000	Industrial Arts Industrial Arts (K-12) Industrial Technology (7-12) Industrial Technology (K-12) Industrial Arts (7-12)
Workforce Readiness Program 170050	Classroom and laboratory experiences designed for students with exceptionalities who are not prepared for the rigors of occupationally specific work force development programs. Program content includes basic elements of laboratory experiences identified from the approved curriculum of one or more Trade and Industrial programs offered in the district, or programs the district has plans for offering. Laboratory experiences might include basic concepts of carpentry, masonry, or electricity in preparation for a specialization in the construction trades cluster; or welding, precision machining, or drafting in preparation for a specialization in the manufacturing cluster. Course content shall also include communication and teamwork; math and measurement; workplace safety and health; blueprint reading; manufacturing fundamentals; and workplace skills. This program should be developed to maximize the use of instructional strategies that link applied academics to laboratory experiences.			170100	Heating, Air Conditioning, and Refrigeration Technician	Voc	170100	Heating, Air Conditioning, and Refrigeration Technician
				170200	Appliance Repair		170200	Appliance Repair
				170301	Automotive Collision Repair		170301	Automotive Collision Repair
				170302	Automotive Technology		170302	Automotive Technology
				170303	Automotive Specialization		170303	Automotive Specialization
				170400	Aviation Occupations		170400	Aviation Occupations
				170401	Aircraft Maintenance		170401	Aircraft Maintenance
				170403	Ground Operations		170403	Ground Operations
				170600	Business Machine Maintenance		170600	Business Machine Maintenance
				170700	Commercial Art Occupations		170700	Commercial Art Occupations
				170801	Maritime Occupations		170801	Maritime Occupations
				170802	Marine Maintenance		170802	Marine Maintenance
				170900	Commercial Photography Occupations		170900	Commercial Photography Occupations
				171001	Carpentry		171001	Carpentry
				171002	Electrical Trades		171002	Electrical Trades
				171003	Heavy Equipment (Construction)		171003	Heavy Equipment (Construction)
				171004	Masonry		171004	Masonry
				171005	Painting and Decorating		171005	Painting and Decorating
				171007	Plumbing and Pipefitting		171007	Plumbing and Pipefitting
				171011	Building and Property Maintenance		171011	Building and Property Maintenance
				171012	Industrial Maintenance & Repair Occupations		171012	Industrial Maintenance & Repair Occupations
				171013	Resilient Floor Installation		171013	Resilient Floor Installation
				171016	Manufactured Homes Servicing		171016	Manufactured Homes Servicing
				171100	Custodial Services		171100	Custodial Services
				171200	Medium/Heavy Truck Technician		171200	Medium/Heavy Truck Technician
				171300	Drafting Occupations		171300	Drafting Occupations
				171402	Power Transmission		171402	Power Transmission
				171403	Motor Repair		171403	Motor Repair
				171503	Electronics		171503	Electronics
				171504	Telecommunications		171504	Telecommunications
				171505	Computer Network Technology		171505	Computer Network Technology
				171900	Graphic Occupations		171900	Graphic Occupations
				172000	Chemical Laboratory Assisting		172000	Chemical Laboratory Assisting
				172004	Industrial Laboratory Assisting		172004	Industrial Laboratory Assisting
				172302	Precision Machining		172302	Precision Machining
				172303	Manufacturing Operations		172303	Manufacturing Operations
				172304	Heavy Metal Fabrication		172304	Heavy Metal Fabrication

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Workforce Readiness Program 170050		Vocational	7-12 K-12 7-12 K-12 7-12	172305 172306 172307 172700 172801 172802 172808 173100 173601 179962	Sheet Metal Welding & Cutting Tool and Die Making Plastics Occupations Fire Fighter Training (Paid) Criminal Justice Private Security Power Equipment Technology Millwork and Cabinet Making Hazardous Materials Management Technology	Voc	172305 172306 172307 172700 172801 172802 173100 173601 179962	Sheet Metal Welding & Cutting Tool and Die Making Plastics Occupations Fire Fighter Training (Paid) Criminal Justice Power Equipment Technology Millwork and Cabinet Making Hazardous Materials Management Technology
Air Conditioning, Heat and Refrigeration Technician 170100	Classroom and laboratory experiences that enable the student to become proficient on the installation, repair, and maintenance of residential, commercial, and industrial air-conditioning systems. Included is instruction related to electrical principals; electric motors; controls; refrigeration, heating, and air-conditioning principals and practices; and piping systems. Curriculum is based on the Occupational Competency Analysis Profile (OCAP) for Heating, Air-Conditioning, and Refrigeration Technician. Revised 5/13/98.		Voc	170100	Air Conditioning/Heating		170100	Air Conditioning/Heating
Appliance Repair 170200	Classroom and laboratory learning experiences concerned with the diagnosis, repair, and maintenance of major home appliances. This includes refrigerators, room air-conditioners, freezers, washing machines, clothes dryers, dishwashers, food waste disposers, compactors, ranges, ovens, cooktops, and microwave ovens. Instruction includes interpersonal relationships, personal behavior and work habits; safety; communication skills; basic mechanical, electrical, and gas skills; as well as instruction related to specific types of major home appliances. Revised 5/13/98.			170200	Major Appliance Repair		170200	Major Appliance Repair

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Auto Collision Repair 170301	Specialized learning experiences concerned with all phases of the repair of damaged bodies, fenders, including metal straightening by hammering; smoothing areas by filing, grinding, or sanding; concealment of imperfections; painting; and replacement of body components, including trim. The instructor and the program must be ASE certified in Structural Analysis and Damage Repair plus 3 of the 4 optional areas. Revised 5/13/98.	Voc	Voc	170301	Automotive Collision Repair	Voc	170301	Automotive Collision Repair
Auto Technology 170302	Learning experiences concerned with the components of the vehicle, including engine, transmissions, steering, suspension, brakes, and electrical/electronic systems. Included is training in the use of diagnostic and testing equipment and tools used in the repair process. The instructor and the program must be ASE certified in Brakes, Engine Performance, Electrical/Electronic Systems, and Suspension and Steering plus 2 of the 4 optional areas. Revised 5/13/98.			170302	Automotive Technology		170302	Automotive Technology
Auto Specialization 170303	Learning experiences that involve more detailed training in the adjustment and repair of the automobile, including the cooling system, transmission, fuel system, brake system, and other units to provide greater proficiency in the servicing of selected components. The school requesting this program must have an ASE certified Auto Technology program in place. This is a one-year program. Revised 5/13/98.			170302 170303	Automotive Technology Automotive Specialization		170302 170303	Automotive Technology Automotive Specialization
Aviation Occupations 170400	Classroom and practical experiences that include instruction relating to aircraft maintenance, aircraft operation, and ground support. Instructor and program must be certified by the Federal Aviation Administration (FAA) in appropriate subject areas. Revised 5/13/98.			170400 170401	Aviation Occupations Aircraft Maintenance		170400 170401	Aviation Occupations Aircraft Maintenance

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Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Aircraft Maintenance 170401	Classroom and lab learning experiences concerned with the inspection, repair, servicing, and overhauling of all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables, and hydraulic units. Involves learning the use of technical manuals and various kinds of testing equipment. Instructor and program must be certified by the Federal Aviation Administration (FAA) in airframe and power plant. Revised 5/13/98.	Vocational	Voc	170401	Aircraft Maintenance	Voc	170401	Aircraft Maintenance
Ground Operations 170403	Classroom and practical experiences concerned with the ground support of commercial aircraft (passenger and cargo). Experiences will include passenger service, including baggage handling, ticket agent, aircraft preflight/postflight service, and ground control traffic control. Revised 5/13/98.			170403	Ground Operations		170403	Ground Operations
Business Machine Maintenance 170600	Classroom and shop learning experiences concerned with maintaining and repairing a variety of office machines, such as electronic typewriters, dictation machines, calculators, and data processing equipment used for correspondence, recording and data processing, duplicating, and mailing. Instruction includes diagnostic techniques; mechanical principles, nomenclatures; use and care of special hand and power tools; soldering; mechanical drawing; principles of electricity and electronics; use of testing devices; business procedures; and customer relations. Revised 5/13/98.			170600	Business Machine Maintenance		170600	Business Machine Maintenance
Commercial Art Occupations 170700	Organized specialized learning experiences that include theory and laboratory and shop work as they relate to the design and execution of layouts and illustrations for advertising, display, and instructional manuals. Instruction includes advertising theory and preparation of copy, lettering, poster design, fashion illustration, silk-screen, (con't next page)			170700	Commercial Art Occupations		170700	Commercial Art Occupations

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Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Commercial Art Occupation	Air brush and touch-up, inks and color dynamics, package and product design, drawings for line and halftone reproduction, and other display devices and exhibits. Instruction leads to preparation for various types of employment such as Fashion Illustrator, Technical Illustrator, Interior Decorator, and Advertising Artist. Revised 5/13/98.	Vocational	Voc	170700	Commercial Art Occupations	Voc	170700	Commercial Art Ocupations
Maritime Occupations 170801	Organized learning experiences concerned with skills for water transportation, including the use and maintenance of line and nets, navigational aids, and radio and fundamental electronic equipment; techniques for survival at sea, and weather forecasting; and fundamental maintenance of decks and surfaces, engines, and power plants.			170801	Maritime Occupations		170801	Maritime Occupations
Marine Maintenance 170802	Specialized classroom and laboratory experiences concerned with the repair and maintenance of electrical and mechanical equipment, and the structural repair of inboard and inboard-outboard motor boats, yachts, tugs, and barges. Revised 5/13/98.			170802	Marine Maintenance		170802	Marine Maintenance
Commercial Photography Occupations 170900	Organized specialized learning experiences that include theory, laboratory, and studio work as each relates to all phases of camera uses and photographic processing. Instruction includes composition and color dynamics; contact printing and enlarging; film development; airbrush and retouching; coloring; copying; utilization of camera, meters, and other photographic equipment. Areas of study include portrait, commercial, and industrial photography, leading to employment as a Commercial Photographer, Airbrush Artist, Camera person (offset printing), Audio-Visual Projectionist, and Camera person (broadcasting).			170900	Commercial Photography Occupations		170900	Commercial Photography Occupations

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Carpentry 171001	Classroom and laboratory experiences involving the layout, construction, and repair of residential and commercial structures. Included is instruction in the care and use of power tools, equipment, and materials used in the construction process; floor, wall, ceiling, and roof framing; the installation of insulation and roofing; and interior and exterior finish detail. Curriculum is based on the Occupational Competency Analysis Profile (OCAP) for Carpentry. Revised 5/13/98.	Vocational	Voc	171001	Carpentry	Voc	171001	Carpentry
Electrical Trades 171002	Specialized classroom and laboratory experiences concerned with the layout, assembly, installation, testing, and maintenance of electrical fixtures and apparatus, and the wiring used in electrical systems. Instruction is provided in worksite safety; electrical principles; the application of codes and standards; residential, commercial, and industrial installations including motors and specialized systems; and the reading, interpretation, and application of blueprints and wiring diagrams. A one-year program option is available with an exit in residential wiring, or with an exit in commercial/industrial wiring upon the recommendation of the local board of education. Curriculum is based on the Occupational Competency Analysis Profile (OCAP) for Electrical Trades. Revised 5/13/98.			171002	Electrical Trades		171002	Electrical Trades
Heavy Equipment (Construction) 171003	Classroom and practical work experiences concerned with the operation, maintenance, and repair of heavy-duty construction equipment, such as bulldozers, backhoes, cranes, graders, tractors, concrete mixers, crawler-mounted shovels, trailer-mounted compressors, and the gasoline or diesel engines powering the equipment. Revised 5/13/98.			171003	Heavy Equipment (Construction)		171003	Heavy Equipment (Construction)

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Masonry 171004	Specialized classroom and laboratory experiences concerned with the cutting, chipping, and fixing in position of brick and concrete block. Included is instruction in the care and use of tools, equipment, and materials for the preparation and performance of masonry construction; the selection and preparation of materials used in the laying of brick and block; and training in blueprint reading, record keeping, estimating, and safety. Curriculum is based on the Occupational Competency Analysis Profile (OCAP) for Masonry. Revised 5/13/98.	Vocational	Voc	171004	Masonry	Voc	171004	Masonry
Painting and Decorating 171005	Specialized classroom and laboratory experiences concerned with the preparation in finishing of exterior and interior surfaces by the application of protective or decorative coating materials, such as lacquer, paint, and wallpapers. Included is instruction in the scraping, burning, or sanding surfaces; making, mixing, and matching paints and colors; applying coatings with brush, roller, or spray-gun; and by cutting, pasting, and hanging wallpaper. Emphasis is on the selection, use and storage of materials in compliance with all state and federal environmental regulations. Revised 5/13/98.			171005	Painting and Decorating		171005	Painting and Decorating
Plumbing and Pipefitting 171007	Specialized classroom and laboratory experiences concerned with layout, assembly, installation, alteration, and repair of piping systems and relate fixtures and fittings. Included is instruction in the use of pipe-cutting, bending, grooving, and threading tools; the maintenance and use of welding, soldering, and brazing equipment; the care and safe use of hand and power tools and equipment; and the reading, interpretation, and application of blueprints and piping diagrams. Revised 5/13/98.			171007	Plumbing and Pipefitting		171007	Plumbing and Pipefitting

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Building and Property Maintenance 171011	Organized leaning experiences in the classroom and laboratory concerned with the skills necessary to keep the physical structure of an office building, factory, apartment building, house, or similar structure in good repair. Included is instruction in carpentry; roofing application and repair; ceramic tile and masonry application and repair; electrical installation and repair; painting and wallpapering; and plumbing. Curriculum is based on the Occupational Competency Analysis Profile (OCAP) for Building and Property Maintenance. Revised 5/13/98	Vocational	Voc	171011	Building and Property Maintenance	Voc	171011	Building and Property Maintenance
Industrial Maintenance and Repair Occupations 171012	Organized learning experiences in the classroom and shop concerned with the maintenance of machinery and mechanical equipment of an industrial plant or factory. Inspection, disassembly, repair, and reassembly of machines and equipment is included in the training experience. Skill training in the use of tools from several trades is also included.			171012	Industrial Maintenance		171012	Industrial Maintenance
Resilient Floor Installation 171013	Classroom and laboratory experiences involving the layout, construction, and repair of inlaid, hardwood, or composition floors, and laying asphalt, carpet, cork, linoleum, and rubber blocks or sheet materials. Included is instruction in the care and use of tools, equipment, and materials used in the installation process; the disconnection and removal of obstacles; the cleaning, scraping, and sanding of surfaces to provide a clean, smooth foundation; the measuring and cutting of materials according to blueprints and sketches; the spreading of adhesives or cement to the prepared foundation; and the laying of the floor covering. Revised 5/13/98			171013	Resilient Floor Installation		171013	Resilient Floor Installation

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Manufactured Home Servicing 171016	Classroom and laboratory experiences concerned with the repair of defective units and systems in mobile, modular, and prefabricated homes and travel trailers. Instruction includes using hand tools and power tools; identifying and repairing leaks and structural damage; locating and repairing damaged plumbing and electrical systems; applying interior and exterior finishes; providing upgrades to existing mechanical systems; and repairing or replacing furnishing. Revised 5/13/98.	Vocational	Voc	17016	Manufactured Home Servicing	Voc	171016	Manufactured Home Servicing
Custodial Services 171100	Organized learning experiences in the classroom and laboratory concerned with the skills necessary to provide all phases of care and cleaning of buildings; including fixtures, furnishings, and building interiors. Included is instruction in the care and maintenance of such materials linoleum, plastic, terrazzo, tile, and wood floors; rugs and carpet; plastic, wood panel, paint, and synthetic wall coatings; and the use and care of hand and power tools. Additional emphasis is places on (1) characteristics of various cleaning agents and protective coating, including their reactions on surfaces, and procedures for applying them; (2) sanitation and disinfectants; (3) work scheduling; and (4) purchase of custodial supplies. Revised 5/13/98.			171100	Custodial Services		171100	Custodial Services

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Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Medium/Heavy Truck Technician 171200	An instructional program that prepares individuals to engage in the service and repair of truck vehicles. Instruction is included in the diagnosis, maintenance, and repair of diesel engines, including fuel injection systems, the drive train, suspension, brakes, hydraulic units, cooling systems, and electrical/electronic systems. The program also includes the study and use of technical manuals, testing and diagnostic equipment, and a variety of hand and power tools. The program and the instructor must be ASE certified in Diesel Engines, Suspension and Steering, Brakes, Electrical/Electronic Systems, Preventive Maintenance Inspection. Revised 5/13/98	Vocational	Voc	171200	Medium/Heavy Truck Technician	Voc	171200	Medium/Heavy Truck Technician
Drafting Occupations 171300	Specialized learning experiences that include theory; laboratory and shop work, as each relates to the gathering and translation of data or specifications; and the planning, preparation, and interpretation of mechanical, and/or architectural drawings and sketches. Instruction includes experiences with board and computer generated drawing reproduction materials, equipment, and processes; systemic drafting office procedures, the preparation of reports and data sheets for specifications writing; the development of plan and process charts and drawings; and model development. Instruction emphasizes the development of skills and knowledge essential for employment in ancillary capacities, such as tracers or reproduction equipment operators, and for occupations such as Mechanical Drafter, Structural Drafter, Detailer, Marine Drafter, Tool Designer, Fixture Designer, and Punch and Die Designer and various C.A.D. positions. Revised 5/13/98.			171300	Drafting Occupations		171300	Drafting Occupations

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Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Power Transmission 171402	Specialized classroom and laboratory experiences concerned with erecting and maintaining power lines and circuits for transmission and distribution of electrical power, and assembling and erecting related equipment and structures. Revised 5/13/98.	Vocational	Voc	171402	Power Transmission	Voc	171402	Power Transmission
Motor Repair 171403	Specialized classroom and practical learning experiences concerned with the assembly, installation, testing, maintenance, and repair of electric motors, generators, transformers, and related equipment.			171403	Motor Repair		171403	Motor Repair
Electronics 171503	Classroom, laboratory, and practical learning experiences that include both theory and practice. Students learn construction, maintenance, and repair of digital, analog, and microprocessor circuits in applications such as communications equipment, consumer equipment, and industrial equipment.			171503	Electronics		171503	Electronics
Telecommunications 171504	Specialized classroom and laboratory experiences concerned with the assembly, installation, operation, maintenance, and repair of telecommunications equipment, which includes pole and tower climbing and construction; pulling, and splicing of cable, including fiber optic; material estimating and job planning; installation and troubleshooting procedures of PBX systems, and field repair of telecommunications systems and equipment. Revised 8/18/98.			171504	Telecommunications		171504	Telecommunications

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Computer Network Technology 171505	Classroom and laboratory experiences that include both the theory and the practice of design, installation, maintenance, and repair of computer networks. Instruction includes the installation, termination, and verification of cabling systems, including fiber optic systems, for establishing Local Area Networks (LANs) and Wide Area Networks (WANs); and the maintenance of both hardware and software to insure efficient operation of those installations. Revised 8/18/98.	Vocational	Voc	171505	Computer Network Technology	Voc	171505	Computer Network Technology
Engineering Technology 171801	A combination of subject matter and experiences designed to prepare a person to gain entry level experiences in an engineering technology cluster program. Students have the option of pursuing a two-year Associate s Degree. The program will follow an approved TCAP and will identify related employment positions locally available for students exiting Tech-Prep after high school phase. Revised 5/13/98.			171300 171503 171801 w/ 888110 171801 w/ 888115 171801 w/ 888120 171801 w/ 888125 171801 w/ 888130 172302	Drafting Occupations Electronics Engineering Technology limited to Drafting Engineering Technology limited to Electricity Engineering Technology limited to Electronics Engineering Technology limited to Machine Trades Engineering Technology limited to Industrial Maintenance Precision Machining		171300 171503 171801 w/ 888110 171801 w/ 888115 171801 w/ 888120 171801 w/ 888125 171801 w/ 888130 172302	Drafting Occupations Electronics Engineering Technology limited to Drafting Engineering Technology limited to Electricity Engineering Technology limited to Electronics Engineering Technology limited to Machine Trades Engineering Technology limited to Industrial Maintenance Precision Machining
Manufacturing Engineering Technology 171802	In this program students master mathematical and scientific principles and technical skills in support of the design, development, and use of integrated industrial manufacturing systems and processes; includes problem solving in design, integration, and prototype testing, systems logistics and material flow, calibration and maintenance of instruments, statistical process control and production coordination, operational and maintenance procedures, as well as operational diagnosis and repair. Students have the option of pursuing a two-year Associate's Degree. The program will follow an approved TCAP and will identify related employment positions locally available for students exiting Tech-Prep after the high school phase. Revised 5/13/98.			171012 171300 171503 171802 w/888110 171801 w/ 888115 171801 w/ 888120 171801 w/ 888125 171801 w/ 888130 172302	Industrial Maintenance Drafting Occupations Electronics Manufacturing Engineering Technology limited to Drafting Manufacturing Engineering Technology limited to Electricity Manufacturing Engineering Technology limited to Electronics Manufacturing Engineering Technology limited to Machine Trades Manufacturing Engineering Technology limited to Industrial Maintenance Precision Machining		171012 171300 171503 171802 w/ 888110 171801 w/ 888115 171801 w/ 888120 171801 w/ 888125 171801 w/ 888130 172302	Industrial Maintenance Drafting Occupations Electronics Manufacturing Engineering Technology limited to Drafting Manufacturing Engineering Technology limited to Electricity Manufacturing Engineering Technology limited to Electronics Manufacturing Engineering Technology limited to Machine Trades Manufacturing Engineering Technology limited to Industrial Maintenance Precision Machining

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Graphic Occupations 171900	Specialized learning experiences that include theory, laboratory and shop work as they relate to all phases of layout, composition, presswork, and binding, including flexolgraphy, lithography, photoengraving, and other techniques related to the printing industry. Emphasis is place on camera platework imposition, offset press makeup and operation, paper cutting, ink and color preparation, binding, and production by silk-screen process. Emphasis is placed in desktop publishing including digital image and electronic process procedures. Instruction leads to preparation for various types of employment, such as Compositor, Photographer, Platemaker, Cost Analyst, Expediter, Production Planner, and Computer Assisted Layout. Programs must be accredited by Print Ed (P.I.A.) by the year 2000. Revised 5/13/98.	Vocational	Voc	171900	Graphic Occupations	Voc	171900	Graphic Occupations
Chemical Lab Assisting 172000	Specialized classroom and laboratory experiences organized to prepare a person to perform the quantitative, qualitative, and analytical analysis of human or naturally occurring substances in a chemical laboratory. Revised 5/13/98. Specialized classroom and laboratory experiences organized to prepare a person to perform the quantitative, qualitative, and analytical analysis of human or naturally occurring substances in an industrial laboratory. Revised 5/13/98.			172000	Chemical Lab Assisting		172000	Chemical Lab Assistant
Industrial Lab Assisting 172004	Specialized classroom and shop learning experiences that are concerned with all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling, feeds, and speeds of machining. Also emphasized is work on the bench, lathes, shapers, milling machines, grinders, and drills; the use of precision measuring instruments, such as layout tools, micrometers, and gauges; methods of machining and heat treatment of (con't. next page)			172004	Industrial Assisting		172004	Industrial Assisting

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Industrial Lab Assisting 172004	Various metals; blueprint reading; and the layout of machine parts. Instruction prepares the learner to operate and repair all machines including those with computerized numerical controls (CNC). Programs will be certified by National Institute for Metalworking Skills (NIMS). Revised 5/13/98.	Vocational	Voc	172004	Industrial Asst	Voc	172004	Industrial Asst
Precision Machining 172302	Specialized learning experiences to prepare a semi-skilled worker for entry level positions in diverse manufacturing occupations not specifically addressed in the OCAPs, TCAPs, or ITACs. Revised 8/18/98.			172302 172307	Precision Machining Tool/Die Making		172302	Precision Machining
Manufacturing Occupations 172303	Specialized learning experiences to prepare the student to be a metal worker capable of fabricating and assembling a variety of products in many industries. Instruction includes layout; sequence of operating fabricating machines; positioning, alignment, fitting, and welding together of parts; and the design and construction of templates and fixtures.			171012 172302 172303 172307	Industrial Maintenance Precision Machining Manufacturing Operations Tool/Die Making		171012 172302 172303 172307	Industrial Maintenance Precision Machining Manufacturing Operations Tool/Die Making
Heavy Metal Fabrication 172304	Specialized classroom and shop-learning experiences that are concerned with layout, fabrication, erection, installation, and maintenance of items made of steel, copper, stainless steel, and aluminum, such as ventilating, air-conditioning, and heating ducts; kitchen equipment; signs; furniture; and skylights. Instruction includes the use of hand tools and machines such as cornice brake, forming rolls, and squaring shears; drafting; and blueprint reading.			172304 172306	Heavy Metal Fabrication Welding and Cutting		172304 172306	Heavy Metal Fabrication Welding and Cutting
Sheet Metal 172305	Specialized classroom and shop-learning experiences that are concerned with all types of metal welding, brazing, and flame cutting. Instruction emphasizes properties of metals, blueprint reading, electrical principles, welding symbols, and mechanical drawing.			172305	Sheet Metal		172305	Sheet Metal

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Welding and Cutting 172306	All welding programs will be certified in Level I of the American Welding Society s Schools Excelling Through National Skill Standards Education (S.E.N.S.E.) program by year 2000. Revised 5/13/98.	Vocational	Voc	172306	Welding and Cutting	Voc	172306	Welding and Cutting
Tool & Die Making 172307	Organized classroom and shop learning experiences concerned with analyzing specifications, laying out metal stock, setting up and operating machine tools, and fitting and assembling parts to make and repair metal working dies, cutting tools, jigs, fixtures, gauges, and machinist's hand tools. Includes instruction in application of tool and die design and construction, shop mathematics; metal properties, layout, machining, and assembly procedures.			172307	Tool & Die Making		172307	Tool & Die Making
Barbering 172601	Classroom and practical learning experiences that are concerned with haircutting and styling, shaving, shampooing, and massaging. Emphasis is on hygiene, skin and scalp diseases, and sterilization of instruments and utensils. Instruction is designed to qualify pupils for licensing examinations. Programs must be approved by the Ohio State Barber Board. Revised 5/13/98.			172601	Barbering		172601	Barbering
Cosmetology 172602	Classroom and practical learning experiences that are concerned with a variety of beauty treatments, including the care and beautification of the hair, complexion, and hands. Instruction includes shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, and bleaching; permanent waving; facials; manicuring; and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management (including keeping records), and customer relations are emphasized. Instruction is designed to (con't. next page)			172602	Cosmetology		172602	Cosmetology

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
	qualify completers for licensing examination. Program 1500 hours and approved by the Ohio Board of Cosmetology. Revised 5/13/98.	Vocational	Voc			Voc		
Plastics Occupations 172700	Classroom and laboratory experiences dealing with plastics and their characteristics. Instruction includes the molding, fitting, internal carving, and finishing of plastic and fiber glass materials into products. Included is preparation for production associates, set-up and maintenance persons, and quality assurance technicians. Revised 5/13/98.			172700	Plastic Occupations		172700	Plastic Occupations
Fire Fighter Training 172801	Specialized classroom and practical experiences concerned with the preparation of paid, full-time fire fighters. Instruction includes fire department organization; safety; fire alarm and communications; fire behavior; portable extinguishers; personal protective equipment; forcible entry; ventilation; rope; ladders; fire hose, appliances, and streams; foam fire streams; fire control; salvage; overhaul; emergency medical care; rescue; water supplies; sprinklers; response to hazardous materials incidents; fire prevention, public education, and fire cause determination; and building construction. The training institution must be chartered by the Department of Public Safety, Division of EMS, and the program must be approved by the Department of Public Safety, Division of EMS. Revised 5/13/98.			172801	Fire Fighter Training		172801	Fire Fighter Training
Criminal Justice 172802	Specialized classroom and practical-learning experiences that are designed to supplement the training provided by officially designated law enforcement agencies. Instruction includes acquiring and maintaining the uniform; patrolling on foot or in an automobile during the day or night; dealing with misdemeanors, felonies, traffic violations, and (con't. next page)			172802 172808	Criminal Justice Private Security	7-12 K-12 7-12 K-12	172802	Law Enforcement

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Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Criminal Justice 172802 (continued)	accidents; making arrests; and testifying in court; legal aspects; defensive tactics; private security; occupational and health safety; and civil emergencies. Program certified by the Ohio Peace Officers Training Commission for Private Security (135 Hrs.) and/or certified in Basic Peace Officer Training (445-475 Hrs.).	Vocational	Voc	172802 172808	Criminal Justice Private Security	Voc	172802	Law Enforcement
Power Equipment Technology 173100	Classroom and shop experiences concerned with maintaining and repairing a variety of portable power equipment, e.g., lawnmowers, outboard motorboats, chain-saws, and rototillers. Instruction includes principles of internal combustion engine operation, reading technical manuals, and customer relations. One-year specialization program may be approved in small engine repair and servicing under this course code.			173100	Power Equipment Technology		173100	Power Equipment Technology
Millwork and Cabinet Making 173601	Classroom and laboratory experiences involving the mass production of products such as window frames, moldings, trims, and panels; and the manufacture of such products as furniture, store fixtures, kitchen cabinets, and office furnishings. Instruction includes blueprint reading and sketching; job planning and layout; the identification and selection of woods and finishes; cutting, shaping, and assembling parts by means of hand tools and wood-working machines; installing hardware; and refinishing furniture. Revised 5/13/98.			173601	Millwork & Cabinet Making		173601	Millwork & Cabinet Making
Diversified Cooperative Training (DCT) 179960	This is a specialized program designed for high school students who are at least 16 years of age and are in their final year of high school. The program allows students who are enrolled in Trade and Industrial/Health Occupations education to experiences the world of work and to receive high school credits			160610 w/600120	Technology Education w/vocational worksite teacher/coordinator endorsement.		100000 w/ 600120 100005 w/ 600120 101315 w/ 600120 101320 w/ 600120 102000 w/ 600120	Industrial Arts w/vocational worksite teacher/coordinator endorsement Industrial Arts (K-12) w/vocational worksite teacher/coordinator endorsement Industrial Technology (7-12) w/vocational worksite teacher/coordinator endorsement

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Diversified Cooperative Training (DCT) 179960 (continued)	ment becomes an extension of the vocational classroom. Students receive experiences to aid them in making the transition from school to work. The students on-the-job training is closely supervised and coordinated between the school and place of employment. Students receive monetary compensation (for work performed for their employers) while receiving on-the-job training in various occupations administered by the Trade and Industrial/Health Occupations Education service area. Revised 5/13/98.	Vocational	Voc	160610 w/600120	Technology Education w/vocational worksite teacher/coordinator endorsement.	Voc	170100 w/ 600120	Industrial Technology (K-12) w/vocational worksite teacher/coordinator endorsement
							170200 w/ 600120	Industrial Arts (7-12) w/vocational worksite teacher/coordinator endorsement
				170100 w/ 600120	Technology Education w/vocational worksite teacher/coordinator endorsement		170301 w/ 600120	Technology Education w/vocational worksite teacher/coordinator endorsement
				170200 w/ 600120	Heating, Air Conditioning, and Refrigeration Technician w/vocational worksite teacher/coordinator endorsement		170302 w/ 600120	Heating, Air Conditioning, and Refrigeration Technician w/vocational worksite teacher/coordinator endorsement
				170301 w/ 600120	Appliance Repair w/vocational worksite teacher/coordinator endorsement		170303 w/ 600120	Appliance Repair w/vocational worksite teacher/coordinator endorsement
				170302 w/ 600120	Automotive Collision Repair w/vocational worksite teacher/coordinator endorsement		170302 w/ 600120	Automotive Collision Repair w/vocational worksite teacher/coordinator endorsement
				170303 w/ 600120	Automotive Technology w/vocational worksite teacher/coordinator endorsement		170401 w/ 600120	Automotive Technology w/vocational worksite teacher/coordinator endorsement
				170400 w/ 600120	Automotive Specialization w/vocational worksite teacher/coordinator endorsement		170403 w/ 600120	Automotive Specialization w/vocational worksite teacher/coordinator endorsement
				170401 w/ 600120	Aviation Occupations w/vocational worksite teacher/coordinator endorsement		170600 w/ 600120	Aviation Occupations w/vocational worksite teacher/coordinator endorsement
				170403 w/ 600120	Aircraft Maintenance w/vocational worksite teacher/coordinator endorsement		170401 w/ 600120	Aircraft Maintenance w/vocational worksite teacher/coordinator endorsement
				170403 w/ 600120	Ground Operations w/vocational worksite teacher/coordinator endorsement		170403 w/ 600120	Ground Operations w/vocational worksite teacher/coordinator endorsement
				170600 w/ 600120	Business Machine Maintenance w/vocational worksite teacher/coordinator endorsement		170700 w/ 600120	Business Machine Maintenance w/vocational worksite teacher/coordinator endorsement
				170700 w/ 600120	Commercial Art Occupations w/vocational worksite teacher/coordinator endorsement		170801 w/ 600120	Commercial Art Occupations w/vocational worksite teacher/coordinator endorsement
				170801 w/ 600120	Maritime Occupations w/vocational worksite teacher/coordinator endorsement		170801 w/ 600120	Maritime Occupations w/vocational worksite teacher/coordinator endorsement
				170802 w/ 600120	Marine Maintenance w/vocational worksite teacher/coordinator endorsement		170802 w/ 600120	Marine Maintenance w/vocational worksite teacher/coordinator endorsement

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Diversified Cooperative Training (DCT) 179960 (continued)		Vocational	Voc	170900 w/ 600120	Commercial Photography Occupations w/vocational worksite teacher/coordinator endorsement	Voc	170900 w/ 600120	Commercial Photography Occupations w/vocational worksite teacher/coordinator endorsement
				171001 w/ 600120	Carpentry w/vocational worksite teacher/coordinator endorsement		171001 w/ 600120	Carpentry w/vocational worksite teacher/coordinator endorsement
				171002 w/ 600120	Electrical Trades w/vocational worksite teacher/coordinator endorsement		171002 w/ 600120	Electrical Trades w/vocational worksite teacher/coordinator endorsement
				171003 w/ 600120	Heavy Equipment (Construction) w/vocational worksite teacher/coordinator endorsement		171003 w/ 600120	Heavy Equipment (Construction) w/vocational worksite teacher/coordinator endorsement
				171004 w/ 600120	Masonry w/vocational worksite teacher/coordinator endorsement		171004 w/ 600120	Masonry w/vocational worksite teacher/coordinator endorsement
				171005 w/ 600120	Painting and Decorating w/vocational worksite teacher/coordinator endorsement		171005 w/ 600120	Painting and Decorating w/vocational worksite teacher/coordinator endorsement
				171007 w/ 600120	Plumbing and Pipefitting w/vocational worksite teacher/coordinator endorsement		171007 w/ 600120	Plumbing and Pipefitting w/vocational worksite teacher/coordinator endorsement
				171011 w/ 600120	Building and Property Maintenance w/vocational worksite teacher/coordinator endorsement		171011 w/ 600120	Building and Property Maintenance w/vocational worksite teacher/coordinator endorsement
				171012 w/ 600120	Industrial Maintenance & Repair Occupations w/vocational worksite teacher/coordinator endorsement		171012 w/ 600120	Industrial Maintenance & Repair Occupations w/vocational worksite teacher/coordinator endorsement
				171013 w/ 600120	Resilient Floor Installation w/vocational worksite teacher/coordinator endorsement		171013 w/ 600120	Resilient Floor Installation w/vocational worksite teacher/coordinator endorsement
				171016 w/ 600120	Manufactured Homes Servicing w/vocational worksite teacher/coordinator endorsement		171016 w/ 600120	Manufactured Homes Servicing w/vocational worksite teacher/coordinator endorsement
				171100 w/ 600120	Custodial Services w/vocational worksite teacher/coordinator endorsement		171100 w/ 600120	Custodial Services w/vocational worksite teacher/coordinator endorsement
				171200 w/ 600120	Medium/Heavy Truck Technician w/vocational worksite teacher/coordinator endorsement		171200 w/ 600120	Medium/Heavy Truck Technician w/vocational worksite teacher/coordinator endorsement

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Diversified Cooperative Training (DCT) 179960 (continued)		Vocational	Voc	171300 w/ 600120	Drafting Occupations w/vocational worksite teacher/coordinator endorsement	Voc	171300 w/ 600120	Drafting Occupations w/vocational worksite teacher/coordinator endorsement
				171402 w/ 600120	Power Transmission w/vocational worksite teacher/coordinator endorsement		171402 w/ 600120	Power Transmission w/vocational worksite teacher/coordinator endorsement
				171403 w/ 600120	Motor Repair w/vocational worksite teacher/coordinator endorsement		171403 w/ 600120	Motor Repair w/vocational worksite teacher/coordinator endorsement
				171503 w/ 600120	Electronics w/vocational worksite teacher/coordinator endorsement		171503 w/ 600120	Electronics w/vocational worksite teacher/coordinator endorsement
				171504 w/ 600120	Telecommunications w/vocational worksite teacher/coordinator endorsement		171504 w/ 600120	Telecommunications w/vocational worksite teacher/coordinator endorsement
				171505 w/ 600120	Computer Network Technology w/vocational worksite teacher/coordinator endorsement		171505 w/ 600120	Computer Network Technology w/vocational worksite teacher/coordinator endorsement
				171900 w/ 600120	Graphic Occupations w/vocational worksite teacher/coordinator endorsement		171900 w/ 600120	Graphic Occupations w/vocational worksite teacher/coordinator endorsement
				172000 w/ 600120	Chemical Laboratory Assisting w/vocational worksite teacher/coordinator endorsement		172000 w/ 600120	Chemical Laboratory Assisting w/vocational worksite teacher/coordinator endorsement
				172004 w/ 600120	Industrial Laboratory Assisting w/vocational worksite teacher/coordinator endorsement		172004 w/ 600120	Industrial Laboratory Assisting w/vocational worksite teacher/coordinator endorsement
				172302 w/ 600120	Precision Machining w/vocational worksite teacher/coordinator endorsement		172302 w/ 600120	Precision Machining w/vocational worksite teacher/coordinator endorsement
				172303 w/ 600120	Manufacturing Operations w/vocational worksite teacher/coordinator endorsement		172303 w/ 600120	Manufacturing Operations w/vocational worksite teacher/coordinator endorsement
				172304 w/ 600120	Heavy Metal Fabrication w/vocational worksite teacher/coordinator endorsement		172304 w/ 600120	Heavy Metal Fabrication w/vocational worksite teacher/coordinator endorsement
				172305 w/ 600120	Sheet Metal w/vocational worksite teacher/coordinator endorsement		172305 w/ 600120	Sheet Metal w/vocational worksite teacher/coordinator endorsement
				172306 w/ 600120	Welding & Cutting w/vocational worksite teacher/coordinator endorsement		172306 w/ 600120	Welding & Cutting w/vocational worksite teacher/coordinator endorsement
				172307 w/ 600120	Tool and Die Making w/vocational worksite teacher/coordinator endorsement		172307 w/ 600120	Tool and Die Making w/vocational worksite teacher/coordinator endorsement

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Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Diversified Cooperative Training (DCT) 179960 (continued)		Vocational	Voc	172700 w/ 600120	Plastics Occupations w/vocational worksite teacher/coordinator endorsement	Voc	172700 w/ 600120	Plastics Occupations w/vocational worksite teacher/coordinator endorsement
				172801 w/ 600120	Fire Fighter Training (Paid) w/vocational worksite teacher/coordinator endorsement		172801 w/ 600120	Fire Fighter Training (Paid) w/vocational worksite teacher/coordinator endorsement
				172802 w/ 600120	Criminal Justice w/vocational worksite teacher/coordinator endorsement		172802 w/ 600120	Criminal Justice w/vocational worksite teacher/coordinator endorsement
				172808 w/ 600120	Private Security w/vocational worksite teacher/coordinator endorsement		172808 w/ 600120	Private Security w/vocational worksite teacher/coordinator endorsement
				173100 w/ 600120	Power Equipment Technology w/vocational worksite teacher/coordinator endorsement		173100 w/ 600120	Power Equipment Technology w/vocational worksite teacher/coordinator endorsement
				173601 w/ 600120	Millwork and Cabinet Making w/vocational worksite teacher/coordinator endorsement		173601 w/ 600120	Millwork and Cabinet Making w/vocational worksite teacher/coordinator endorsement
				179960	Diversified Cooperative Training		179960	Diversified Cooperative Training
				179962 w/ 600120	Hazardous Materials Management Technology w/vocational worksite teacher/coordinator endorsement		179962 w/ 600120	Hazardous Materials Management Technology w/vocational worksite teacher/coordinator endorsement
Hazardous Materials Management Technology 179962	Learning experiences concerned with the collection, transportation, handling, storage, and disposal of toxic wastes; the monitoring and direction of the cleanup of land, water, and air; and providing advice and technical aid to members of industry and government.			179962			179962	Hazardous Materials Management Technology

Subject Area—Secondary Trade and Industrial

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Vocational Adjustment Lab 179996	Specialized program designed to change inappropriate work behaviors, work attitudes, and social skills into more appropriate ones utilizing a controlled work environment. The laboratory is directed to handicapped students who, in all likelihood, would be unsuccessful in vocational pursuits as a result of their handicapped condition. Admission to the VAL is based upon recommendation generated at a meeting held after students have completed the vocational evaluation process. Only those handicapped students requiring behavior modification techniques relating to work attitudes, critical work skills, social behavior, or physical capabilities can be referred to VALs. The laboratories are one element of a total program of services that should be available to serve that handicapped population. They operate on an open entry/open exit concept whereby students remain only long enough to accomplish the intended objective.	Vocational	Voc	179996	Vocational Adjustment Lab	Voc	179996	Vocational Adjustment Lab

Subject Area—Visual Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Visual Arts 020000	Two- and three-dimensional art forms are created and studied in relation to works created by artists in other cultures and historical periods. Principles of art criticism and aesthetics are employed to reveal the works expressive, formal, and technical properties.	Art	MA	020012	Visual Arts	7-12 K-12	020015 020012	Visual Arts 7-12 Visual Arts K-12
Art Appreciation 020100	Exemplary works of visual art from diverse cultures and historical periods are examined with emphasis on products created by contemporary artists and by the student. The social, creative, and aesthetic values of the works are considered in terms of alternative philosophical points of view.							
Art History 020101	Inquiry is made into the reciprocal impact of visual art and culture (particularly of philosophy, religion, economics, politics, and other art forms). Key works are studied both chronologically and thematically in terms of style, subject matter, formal organization, and medium.							
Design 020210	Students explore in their own work the expressive qualities of the elements of the works of art (line, color, shape, texture, form, and space), and the ways they can be organized according to the principles of unity, variety, composition, rhythm, overlay, balance, emphasis, movement, repetition, proportion, and contrast. How elements and principles have been used by professional artists are also studied.							

Subject Area—Visual Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Crafts 020240	Students acquire utilitarian skills including weaving, jewelry-making, fabric crafting, basketry, metalsmithing, leather-shaping, and wood-forming. Objects by professional craftpersons are studied for their formal, expressive, and technical properties.	Art	MA	020012	Visual Arts	7-12 K-12	020015 020012	Visual Arts 7-12 Visual Arts K-12
Ceramics 020242	Original objects (primary pottery and sculpture) are created with clay using hand building, casting, wheel forming, and glazing techniques. Objects created by professional ceramists are examined for their expressive, formal, and technical properties.			020242				
Drawing and Painting 020250	Pencil, pen and ink, chalk, charcoal, acrylics, oils, and watercolors are explored to create original personal images. Drawings and paintings by professional artists are examined for their formal, expressive, and technical properties.			020250				
Photography and Film Making 020270	Still and motion picture camera procedures are investigated along with darkroom developing and printing techniques. The expressive, formal, and technical qualities of professional works are studied.	Art Voc		020270 160610	Visual Arts Technology Education	7-12 K-12 7-12 7-12 K-12 7-12 K-12 7-12	020015 020012 020270 020271 100005 102000 100315 101320	Visual Arts (7-12) Visual Arts (K-12) Photography (7-12) Film Making Ind. Arts Ind. Arts Ind. Tech Ind. Tech
Printmaking 020280	Linoleum block printing, woodblock printing, silk-screen printing, and etching are studied as possibilities for creating pictures, greeting cards, and fabric designs. Professional printmakers products are examined to determine their technical, formal, and expressive qualities.	Art		020280	Visual Arts	7-12 K-12	020015 020012	Visual Arts 7-12 Visual Arts K-12

Subject Area—Visual Arts

Subject Code and Title	Subject Definition	Subject Credit	License Type	License Code	Licensure Area	Certificate Type	Certificate Code	Certificate Area
Sculpture 020290	Various media such as clay, metal, wood, stone, and wire and various processes such as carving, casting, soldering, and modeling are investigated as means for creating three-dimensional artistic forms. Professional sculptors works are studied for their expressive, formal, and technical properties.	Art	MA	020012	Visual Arts	7-12 K-12	020015 020012	Visual Arts (7-12) Visual Arts (K-12)
AP Arts 029902	An advanced course of organized subject matter and experiences in art that, upon successful completion, grants college credit to the student. Visual art, music, dance, and drama/theater are compared and contrasted to reveal their similar and different formal, expressive, and technical properties. Works from different cultures and time periods as well as those created by the students are studied.	Art Dance Drama/Thea -ter Music				7-12 K-12 7-12 K-12 7-12 K-12	080314 080302 050337 050338 120010 120050	Dance (7-12) Dance (K-12) Drama/Theater (9-12) Drama/Theater (K-12) Music (7-12) Music (K-12)
Graphic Arts Unified Arts	Computer design is explored to develop understanding of techniques, processes, and possibilities of electronic media to understand, create and appreciate visual art.	Art				7-12 K-12	020015 020012	Visual Arts (7-12) Visual Arts (K-12)